



VOL. III.]

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NEXT YEAR.

WE have received an immense number of letters from our subscribers upon the proposed alterations in our journal. To read this mass of correspondence, and extract from it the "yeas" and "nays" of our constituents has been no easy task; to print it entire, we should require the space of about fifty pages. From the selection of letters which we do print in the present number, our readers may learn that the proposition for suppressing the "Price Current" is strongly objected to by the majority, and that the suggestion for increasing the size and consequently the price of the journal is not generally approved of. Our course is therefore quite clear; we must retain the "Price Current," even though its publication may offend some of the wholesale Druggists, and we must not increase the size of the journal. Speaking editorially, we repeat that the space at our disposal is not sufficient for dealing thoroughly with the material that is brought before us during the month. However, now that we have done with the International Exhibition, we shall be able to devote more space to questions affecting the trade. The series of articles on "The Natural Orders of Plants" is concluded in the present number, and next year the talented author intends to supply us regularly with papers on New Remedies, and various subjects of practical interest. Mr. W. B. Tegetmeier and Mr. C. W. Quin, F.C.S., will remain on our staff, which we shall strengthen considerably with writers whose signatures will be familiar to all who read the first-class scientific periodicals.

During the Exhibition we introduced the journal to the notice of almost all the British, Colonial, and Foreign Exhibitors, and have succeeded in greatly raising its circulation. The demand for advertising space is daily increasing, in consequence of this increased circulation, and we find it necessary to alter our scale of charges, and also the style of setting up the advertisements of those wanting situations. Our new scale will be found on the back of the cover.

We shall commence the new volume with a number which we believe will give our subscribers increased confidence in their trade organ. Already the brains of our contributors are at work, and we are satisfied that their productions will be admired. The writer of these brief remarks will always be happy to receive suggestions from those who have the interest of the trade—and consequently of the journal—at heart, and will endeavour to carry them out for the benefit of the class which he has the honour to serve.

THE DISTRESS IN THE COTTON DISTRICTS.

THE privations endured so bravely and so patiently by those connected directly and indirectly with the cotton manufacture have occasioned a glorious national effort which testifies to the enormous resources and stupendous wealth of the British

empire, while it proves that this wealth is freely used for the benefit of the honest poor. The county meeting held on the 2nd instant has removed all doubts as to the benevolence of the territorial lords, the manufacturers, and the commercial houses of Lancashire. At this one meeting no less than £130,000 were subscribed! The sum is enormous. We believe that it excels for one sum any collection ever prompted by pity or patriotism. As the contribution of a single county at a single meeting, to a single object, it is certainly without parallel in our history, and without example in any other nation. It is difficult to estimate the total amount subscribed by the United Kingdom and the colonies. It is, however, evident that the supplies which are flowing in to the relief of this great local distress, existing in one province of our industry, are not less than the total State revenues of many a respectable kingdom.

But, magnificent as is this effect, it does not overrun the necessity. Lord Derby states that in a district comprising two millions of inhabitants there are now 431,395 persons who depend for their daily subsistence either upon parochial relief or public charity. We fear we must take this as an increasing rather than a diminishing number, and we cannot calculate upon getting through the winter with less than half a million destitute workpeople who have good claim upon us for shelter, and clothing, and food. Let us not fall one farthing below what is necessary for these suffering people, so willing to work and yet forced into idleness.

While every leading journal, metropolitan and provincial, is urging the claims of our distressed brethren, it would ill become a trade organ like the *Chemist and Druggist* to look on without endeavouring to aid the movement which is being so strenuously and effectively pressed in various quarters. Many of our readers have no doubt already given to the committees or collectors in their several localities, but there are others who have not yet contributed; and all can help on the good work. Let every pharmacist place a box to receive subscriptions on his counter, and never lose an opportunity of pleading the cause of the Lancashire operatives with his customers. Great though the sum already subscribed may be, many pennies and shillings and pounds are yet required to carry the cotton operatives through the winter. Should any difficulty be found in handing over the sum collected, for want of a local committee, we may state that we shall be only too ready to receive and forward any sums transmitted to us—heading the list, which might be termed “THE CHEMIST AND DRUGGISTS’ FUND,” with an earnest of our interest, and advertising freely the names of all contributors. We have no doubt that Mr. Alderman Goadsby, the ex-mayor of Manchester, and Vice-President of the United Society, would assist us in conveying the sum subscribed to the sufferers.

It is not mere money contributions, however, that are useful: left-off clothing of every kind may be turned to useful account. The approaching winter will bring many a biting pang to famished, ill-clad wretches, whose distress arises from no fault of their own. Hats, shoes, cotton and woollen garments, that have done good service to the first wearers, may yet advantageously serve those whose own have been from dire necessity consigned to the pawn-shop, to obtain a meal for a famishing family. As an instance of how everything may be turned to account—even the cloth linings of the various walls and counters of the Courts in the International Exhibition, and the sheets which covered the show-cases, have been transmitted, by desire of the Lord Mayor, to Whitecross-street Prison, to be forwarded to Manchester, by the Relief Committee, for use in various ways by the poor.

If all our readers will but do their best in their several circles to contribute towards the relief of the suffering, their own Christmas will pass more comfortably, and that of the sufferers by the cotton famine be brightened, whilst our appeal will not have been made in vain.

ODDS AND ENDS.

THE present number of our journal is somewhat lopsided, owing to the length of the correspondence, and the two articles on the Exhibition. To complete our review of the Chemical and Pharmaceutical Classes in the Volume which we this month bring to a close, we have been compelled to leave out certain regular features, such as "Notes of Novelties," "Notes and Queries," and "Reviews," also some rather important items of news. In the present article we intend to touch upon a few subjects which we will treat more fully in our January number.

The chlorodyne case "*Brown and another v. Towle*," has not been publicly heard in Court. After it was set down for hearing, the plaintiffs obtained permission from the Court to have their Bill dismissed on payment of the defendant's costs, and the Bill has since been dismissed with costs accordingly. The plaintiffs, however, did not withdraw from the suit without threats of proceedings of a more summary nature.

The great magenta case was tried on the 10th inst. at the Court of Queen's Bench. The plaintiffs, Simpson, Maule, and Nicholson, as assignees of a patent granted to Mr. Henry Medlock for improvements in the preparation of red and purple dyes, brought an action against Wilson and Co., manufacturing chemists, of Mile-end, for an infringement of this patent. The jury having heard the evidence, remained locked up nearly two hours, but as they were unable to agree, they were discharged without giving a verdict.

Some leading members have been making unfair use of their knowledge of the contents of the forthcoming *Pharmacopæia*, by getting the start of the rest of the trade in the sale of some of its preparations. We are glad to find that there were some members of the Society brave enough to protest against the conduct of those who ought to set the example of honourable dealing. We hope to be able to give our readers full particulars of this affair next month.

[We beg to call our readers' attention to the following letter:—

UNITED SOCIETY OF CHEMISTS AND DRUGGISTS.

To the Editor of the Chemist and Druggist.

Sir,—Will you kindly allow me to state to those members of the Society who may not yet have remitted their membership fee of five shillings for the current year, (which can be sent in postage-stamps), that the Committee will be glad to receive it, to enable them to make up a complete list of members to the 31st December.

The Certificate of membership suitable for framing will be sent on receipt of six extra stamps for rolling and postage.

I have pleasure in adding that the numerous public meetings of the trade in the provinces during the past year have largely increased the numerical strength of the Society.

I am, yours most obediently,

Offices of the Society,
2, Bell Yard,
Doctors' Commons, E.C.

E. F. BUOY,
Secretary.

With the present number we issue an Almanack for the year 1863, which we trust may prove a prosperous year for the trade.

THE NATURAL ORDERS OF PLANTS.

LILIACEÆ.—THE LILY ORDER.

MANY of the flowers of this order rank among the most beautiful in the vegetable kingdom, and several of its members contribute greatly to the adornment of our gardens, and are universal favourites; as Lilies, Day-lilies, Tulips, Tuberoses, Hyacinths, Dog's-tooth Violets, &c. They are somewhat widely distributed over the globe, being met with throughout the temperate, warm, and tropical regions, but occur most abundantly in temperate climates. The tropical species are generally arborescent as in the Dracenas, or succulent as in the Aloes, which are mostly found in the Southern parts of Africa. According to Lindley,* "One species is a native of the West Indies, and two or three more of Arabia and the East. Dracenas, the most gigantic of the order, attain their largest size in the Canaries; a *D. Draco* there is described as being between seventy and seventy-five feet high, and forty-six feet and a half in circumference at the base, and was known to have been a very ancient tree in the year 1406. The Northern Flora comprehends for the most part plants of the genera *Scilla*, *Hyacinthus*, *Allium*, and *Ornithogalum*. In the East Indies, Lillyworts are rare; in New Holland they form a distinctly marked feature of the vegetation, and in New Zealand they are represented by the *Phormium* or Flax Bush." The order belongs to the class Exogens, sub-class Petaloideæ, is composed of herbaceous plants, shrubs, or trees, and comprises one hundred and forty-seven genera, and about twelve hundred species.

BOTANY.—The roots are tuberous, or fibrous. The stem is simple or branched, sometimes arborescent; and many of the plants have bulbs and rhizomes. The leaves are narrow, have parallel veins, and are either sessile (having no footstalks), or sheathing. The flowers are regular and generally hermaphrodite (having male and female organs in the same flower), often large and showy, sometimes small and green, with various intermediate gradations. The calyx and corolla (the floral envelopes) are confounded and coloured alike, forming what is called a perianth, which is inferior, and has six divisions. The stamens (male organs) are six in number, and are inserted in the perianth, or rarely on the thalamus, (the receptacle, or extremity of the flowerstalk, into which the organs of the flower are inserted.) The anthers (the little cellular cases on the apex of the stamen, containing the pollen) are introrse (the part by which the pollen is discharged turned inwards towards the pistil or female organ). The ovary (that part of the female organ which contains the ovules, or rudimentary seeds) is superior and three-celled. The style (that part which connects the stigma and the ovary) one. The stigma (that part of the female organ which receives the pollen) is simple, or three-lobed. The fruit is a capsule with loculicidal deliscence (that mode of dehiscence which consists in ripened carpels, splitting or dehiscing through their backs), or succulent and indehiscent, and three-celled. The seeds are numerous and have a fleshy albumen.

DISTINCTION FROM OTHER ORDERS.—It is distinguished from *Amaryllidaceæ*—the *Amaryllis* order—by its free ovary. From *Melanthaceæ*, or *Colchicaceæ*—the *Colchicum* order—it chiefly differs in its anthers being introrse, and its carpels quite consolidated.

GENERAL PROPERTIES.—The properties of this order are not uniform. The plants contain mucilage, resinous matters, acrid volatile oils, and acrid extractive substances, which render them purgative, emetic, diuretic, diaphoretic, stimulant, acrid, &c. Some yield astringent products, others furnish us with fibre for cordage. The bulbs, young shoots, and seeds of several are employed as articles of food, and some are very fragrant.

PRINCIPAL PLANTS AND USES.

ALLIUM.—The species *Ascalonicum* is the Shallot, the bulbs of which are highly prized by many for dietetic purposes. The species *Cepa*, *Porrum*, and *Sativum*, the

* Veg. King., p. 208.

Onion, Leek, and Garlic, are well known, and extensively employed as condiments. A short article on the latter will be found in our Botanical Calendar for July.*

The garlic and onion are sometimes employed medicinally; as an external application, they act as a rubefacient, &c. Administered internally, they are expectorant, diuretic, stimulant, and somewhat anthelmintic. An acrid volatile oil, containing sulphur, exists in all the species. According to Dr. Royle they are called, in Arabic, Busl, Som, and Korras, names which are very similar to those used in the earliest parts of the Bible.† When cultivated in warm, dry regions they lose much of their acidity, and become much milder to the taste, as is the case with the Portugal, Spanish, and Egyptian onions. According to Lindley,‡ “all are cultivated in the gardens of India, and the bulbs of the species *Leptophyllum* are eaten by the Hill people, and the leaves are dried and preserved as a condiment.” The species *Schænoprasum* is the Chive, and *Scorodoprasum* the Rocamboles.

ALOE.—The particular species, furnishing some of the varieties of commercial aloes, have not yet been accurately determined. The species *Indica*, and others, furnishes that known as Indian aloes. The species *Purpurascens* and *Socotrina*, probably yield both Socotrine and Hepatic aloes. The species *Spicata*, Cape aloes, and the species *Vulgaris* or *Barbadosensis*, the kind called Barbadoes aloes. The source of Horse or Caballine aloes, Mocha aloes, and Curaçoa aloes is not accurately known. This well-known drug is used in small doses as a tonic, and in large ones as a purgative and emmenagogue.

ASPARAGUS.—The species *Acutifolius* abounds in the peculiar principle termed *Asparagin*.—The young and succulent shoots of the species *Officinalis*, termed *turios*, when boiled, are much prized as an article of food. These, and the roots and flowering stems, are sometimes employed as diuretics, and communicate a peculiar fetid odour to the urine. It is also sometimes popularly employed as a lithic. The roasted seeds have been employed as a substitute for coffee. The roots of the species *Adscendens*, and *Racemosus*, are said to be both employed in North India, and those of the former are considered to be a good substitute for Salep.

CAMASSIA.—The bulbs of the species *Esculenta*, are eaten by the North American Indians under the name of *Quamash*. They are also known as Biscuit-roots.

CONVALLARIA.—The species *Majalis* is the Lily of the Valley, an indigenous perennial, growing in woods and coppices, and so greatly esteemed for the graceful beauty of its flowers and exquisite fragrance. The flowers when dried are used as a sternutatory. An extract prepared from the flowers or from the roots partakes of the bitterness, as well as of the purgative properties of Aloes. A beautiful and durable green colour may be prepared from the leaves with lime.

CORDYLINE.—The flowers of the species *Reflexa* are said to be emmenagogue.

DIANELLA.—According to Blume a decoction of the root of the species *Odorata*, is administered in Java in gonorrhœa, dysury, and fluor albus.

DRACENA.—The species *Draco* is the Dragon-tree of Teneriffe, which yields a red resin from the surface of its leaves and the cracks in its trunk resembling Dragon's blood, but it is not known in commerce. The roots of the species *Terminalis*, the Ti plant, are baked and eaten largely by the inhabitants of the Sandwich Islands. A fermented beverage is obtained from its juice, and its leaves are employed as fodder for cattle, and for clothing, and other domestic purposes.

ERYTHRONIUM.—The root of the species *Americanum* is used as a substitute for Squills, and the leaves are stated to be more active than the roots. The bulbs of the species *Dens Canis* are said to ease the colic, and to be employed in epilepsy and tinea, and to have been regarded as aphrodisiac and anthelmintic. It is stated to furnish a part of the diet of the Tartars.

FRITILLARIA.—The fetid bulb of the species *Imperialis*, or Crown Imperial, contains a virulent poison, and the honey produced by its flowers is said to be emetic.

GLORIOSA.—The specie *Superba* (*Metronica Superba*) contains a virulent acrid poison.

HYACINTHUS.—The species *Orientalis* is the common cultivated Hyacinth, of which the Harlem florists had, at one time, upwards of two thousand varieties.

* Vol. i., p. 242.

† Num. xl. 5.

‡ Veg. King. p. 203.

LEDEBOURIA.—According to Theodore Martius the bulbs of the species *Hyacinthoides* are used as a substitute for Squills in the East Indies; and Ainslie states that they are employed in cases of stranguary and fever in horses.

LILIUM.—The species *Candidum* is the common White Lily of the gardens, its bulb when roasted has been employed as an emollient cataplasm. An infusion of the flowers in oil was formerly prepared under the name of Oil of Lilies. The species *Chalcedonicum* is said to be the Lilies of the field, *ταχπια του ἀγρου*, mentioned in Scripture, Matt. vi. 28., Luke xii. 27. The bulbs of *Kamtschaticum* and *Spectabile* are commonly eaten in Siberia.

PHORMIUM.—The species *Tenax*, or New Zealand flax, yields a fibre whose toughness rivals that of Hemp; it is much used for twine and cordage, and occasionally for linen, &c. Its root has been recommended as a substitute for Sarsaparilla, and it is stated to act as a purgative, diuretic, sudorific, and expectorant.

POLIANTHUS.—The species *Tuberosa*, or the Tuberose, is well known for its delicious fragrance. This plant emits its scent most strongly after sunset, and it is said that it has been observed in a sultry evening after thunder, when the atmosphere was highly charged with electric fluid, to dart small sparks, or scintillations of lucid flame, in great abundance from such of its flowers as were fading.

POLYGONATUM.—The rhizomes of the species *Officinale* or *Vulgare*, and probably those of the species *Multiflorum*, are sold in the herb shops under the name of Solomon's Seal. They are employed as a popular application to remove the marks from bruised parts of the body. The young shoots have been substituted for Asparagus.

RUSCUS.—The roots of the species *Aculeatus*, or Butcher's Broom, an indigenous perennial, possess aperient and diuretic properties, and were formerly much employed in visceral diseases. The roasted seeds have been employed as a substitute for coffee. It was the *δὲνυμψιν* of Dioscorides. The species *Hypophyllum* has cathartic roots, and was formerly in considerable repute as a stimulant of the uterus.

SANSEVIERA.—The species *Zeylanica* and others, produce very strong and tough fibres, which are known under the name of African Hemp or Bow-string Hemp. The roots are said to have been employed as remedies for gonorrhœa, pains of the joints, and coughs.

SCILLA.—The bulb of the species *Indica* of Roxburgh, is substituted in India for Urginea Scilla, and the bulbs are also employed by weavers in preparing their thread. The bulb of the species *Maritima* (Urginea Scilla), yields our officinal Squill, a well-known and useful medicine, which acts as an expectorant and diuretic, or an emetic and cathartic, in proportion to the dose in which it is given. Two active principles have been obtained from Squill by M. Maudet: Skuleine, an irritating poison, and Scillitin, which is not poisonous, but produces the expectorant and diuretic properties. In large doses Squill is an acro-narcotic poison.

TULBAGIA.—Some of the species of this genus, which are natives of the Cape, smell like garlic, and when boiled in milk are prescribed in phthisical complaints.

XANTHORRHŒA.—The fragrant brownish yellow resin, called Botany Bay gum, or Yellow Resin of New Holland, is the produce of the species *Arborea*. When burned it smells like Benzoin. Another very similar resin is produced from the species *Hastile*. It is termed the Red Resin of New Holland, or Black Boy gum. Both resins exude spontaneously from the trunks of the trees, and possess a fragrant balsamic odour. They have been recommended for use in the preparation of pastilles, and medicinally in those cases where Tolu and other balsams are employed. According to Mr. Drummond, the tops of the different species of Xanthorrhœa furnish all kinds of cattle with valuable fodder in the Swan River Colony, and the lower portions of the leaves are eaten by the aborigines.

YUCCA.—The species *Gloriosa* and others, commonly known as Adam's needle, produce fibres which are but little used. The root yields Cassava, or Indian Bread.

CHEMISTRY AND PHARMACY AT THE INTERNATIONAL EXHIBITION.

By C. W. QUIN, F.C.S.,

SUPERINTENDENT OF CLASS II. (CHEMICAL AND PHARMACEUTICAL PRODUCTS).

BESIDES the eminent firms noticed as exhibitors in the French Department in our last report, we may mention M. Charvin, of Lyons, who exhibited a new green colouring material extracted from the *rhamnus catharticus*. This dye is one of the most permanent and beautiful derived from the vegetable kingdom, and so closely resembles the La-kao of the Chinese as to indicate the common origin of both. Lalouët de Sourdeval and Co. exhibited alkaline cyanides obtained by the action of atmospheric nitrogen—a process tried and abandoned many years since in this country. Camus and Co. contributed a fine series of general chemicals which attracted great admiration. Berjot, of Caen, a name familiar to the readers of French works on pharmacy, exhibited a number of extracts dried *in vacuo*, prepared in the most perfect manner, besides the dried petals of several officinal plants, the colour and freshness of which were as astonishing at the end of the Exhibition as they were at the beginning. We may especially notice some blue petals of the common cornflower, which were as blue and as fresh on the day of their removal as if they had only just been gathered. For a more particular account of these preparations we must refer our readers to the Jury Report of Class II. B. The case of Messrs. Delacretaz and Clouet contained some magnificent crystals of bichromate and chromate of potash, which were undoubtedly the finest in the building, and deserved a better position than the one assigned to them. Messrs. Guinon, Marnas, and Bonnet, contributed some splendid specimens of the various coal tar colours, for which their house is famous. Their establishment may be mentioned as one of those gigantic factories which the discovery of aniline colours has brought into existence. Messrs. Maumené and Rogelet, of Rheims, exhibited a series of potash salts extracted from the grease of wool, the amount of potash contained in which is yet unaccounted for by chemists. Messrs. Homolle and Debreuil contributed specimens of digitaline, the active principle of the *digitalis purpurea*, both pure and in globules, each containing a milligramme of the alkaloid. Messrs. Coignet exhibited glue and gelatine, for which they have long been famous; likewise safety matches, similar to those of Messrs. Bryant and May. They have the disadvantage of being prepared with sulphur, and the friction tablet contains hardly sufficient amorphous phosphorus. Armet de Lisle exhibited ultramarine of excellent quality, and sulphate of quinine, as the successor of Pelletier, the first discoverer. Some idea of the vastness of this establishment may be gained from the fact that over 250 tons of cinchona bark are annually consumed. Besides general chemicals, Gélis exhibited lactate of iron—a preparation which has obtained an honourable position in French pharmacy. Collas, who exhibited benzole, nitro-benzole and other coal products, claims the discovery of the latter substance in 1848; we believe, however, that Mitscherlich discovered it two years before. Ultramarines of very fine quality, both blue and green, were exhibited by J. B. Guimet, of Lyons, the inventor of this important pigment. When the Exhibition was nearly half over, there appeared suddenly in M. Kuhlmann's case a specimen of thallium contributed by M. Lamy. It was a very great pity that this should have been allowed by the French officials, as it gave rise to a controversy that no one can regret more than M. Lamy himself. Not only this—to the surprise of all the English chemists—M. Lamy was awarded a medal by the Jury for discovering a new source of the metal. This award is one of the only blots on the list of the Jury of Class II., who appear to have acted with the greatest discernment and justice throughout. Even supposing that M. Lamy had exhibited from the beginning, we question very much whether the simple discovery of a new source of a rare metal would entitle him to a medal. However, we suppose that, in this instance, the other members of the Jury were obliged to give way before the persistence of M. Lamy's injudicious friends. The total number of exhibitors of chemical and pharmaceutical preparations in the French department was 126, of whom

some eight or ten were bottlers of natural mineral waters. In Belgium, Vander Elst and Cappellmans exhibited general chemicals, the other exhibitors did not contribute anything worth notice. There were only twenty-one Belgian exhibitors, which seems surprisingly few, when we remember the goodly array of scientific chemists that this little kingdom has produced.

Brazil sent six exhibitors, amongst whom we may signalize Messrs. Dos Santos and Son, and Messrs. Gary, Alexio, and Co., who contributed small but excellent collections of organic and inorganic chemicals.

China and Japan contributed two collections of native drugs. Costa Rica sent specimens of sarsaparilla, and one or two balsams. From little Denmark we had fourteen exhibitors, at the head of whom we may place M. Benzon, one of the most talented pharmacists of Copenhagen, who contributed numerous excellent specimens of pharmaceutical, chemical, and photographic preparations, for which he received two distinct Prize Medals and an Honourable Mention.

In Austria there were over eighty exhibitors, of whom we can only notice a few. We must give the place of honour to the half pound of chloride of cæsum and rubidium exhibited in Messrs. Wagenmann, Seybol, and Co.'s collection by Professor Schroetter, of Vienna. This firm showed on its own account a very extensive series of chemical products, more especially sulphuric acid, of which they manufacture nearly 3,000 tons per annum; acetic acid, bichromate of potash, magnesia and its salts, sal ammoniac, and aniline dyes. The firm was excluded from competition in consequence of M. Seybol being on the Jury. Paraffin and paraffin oils were largely exhibited in this department. Furth and Pollak may be mentioned as the two principal exhibitors of lucifer matches, of which there were several. Dr. Lamatsch contributed large and complete series of chemicals, both rare and common, besides numerous specimens of photographic preparations, and a complete series of the extracts contained in the last edition of the *Pharmacopœia Austriaca*. We must conclude our retrospect of the Austrian display, which was second to none in completeness, excellence, and arrangement, by noticing the series of lacquers and varnishes from the factories of A. Keil, of Vienna.

Bavaria sent twelve exhibitors, the most notable of whom were Graf and Co., who sent many specimens of aniline, benzole, and other coal-tar products, and C. Lichtenberger, one of the largest makers of the so-called oil of wine. There were several specimens of ultramarine and other colours exhibited by Hoffman, Mayer, and Lattler. The other members of the Zollverein we examined somewhat hastily. Merck, of Darmstadt, exhibited one of the finest collections of vegetable alkaloids in the building, including strychnia and codeine in enormous crystals, besides morphia, theine, salicin, and a host of other alkaloids and proximate principles. In colours and varnishes, Mehl and Co., Mellinger and Schramm contributed largely. Prussia sent eighty-six exhibitors of chemicals, colours, and varnishes. Hermann and Kunheim both contributed a large series of general chemicals of excellent quality. Dr. Marquardt, of Bonn, exhibited a number of fine and rare chemicals of great interest, including nicotin, coniin, digitalin, santonine, filicin, iodide of amyl, and bromoform. Otto Bredt contributed several very fine specimens of aniline colours, and ultramarines, both blue and green, were particularly well represented, more especially by Leverkus, of Dusseldorf; Dunemay and Co., of Chemnitz, and Pommmer and Co., of Leipzig, contributed fine specimens of dyes and dyestuffs, while Heine and Co., Sachsse and Co., and Schemmel and Co., of Leipzig, vied with each other in sundry extensive collections of the essential oils and essences, for which this city is so celebrated. Kuhemann, of Kahla, Saxe Altenburg, sent large specimens of potassium and sodium. In Wurtemberg, Bohringer, of Stuttgard, contributed various quinine and cinchona salts, and Knosp exhibited aniline and indigo dyes. This ends the Zollverein, which altogether was very well represented in chemicals, dyes, colours, and pharmaceutical preparations. It was, however, a great pity that the members of the Union did not agree to exhibit together, instead of being dotted about in twos and threes in twenty different parts of the building.

Italy exhibited a large number of chemicals and pharmaceutical preparations, but in such lamentable disorder that it was impossible to examine them. One of the most

interesting contributions was the boracic acid and other boracic products from the lagoons of Volturna, exhibited by the heirs of Count Lardarel. Cream of tartar was extensively exhibited, besides numerous specimens of mannite, beautifully crystallized, but spoiled through being put up in dirty or broken bottles and open cigar boxes. The chemical exhibition from Italy may be signalized as the worst arranged in the building, and formed a strong contrast to the collection of dyeing and tanning materials and woods exhibited in Class IV. by Signor Arnaudon, of Turin, which was a model of arrangement and order.

From Holland, which sent twenty-six exhibitors, the only products of interest contributed were madder and garancine from six or seven well-known houses, and some very good fine chemicals for use in pharmacy, and pure chemistry sent by Dr. Fock, near Coppenaar. From Norway there were seven different exhibitors of cod-liver oil, and a series of chromium salts beautifully prepared, from the Leeren Chrome Factory, at Drontheim. Peru contributed nitrate of soda and borax from the now famous Iquique district, besides cascarilla bark and coca leaf. The latter possesses great restorative properties, the miners and couriers of the district in which it grows using it to support themselves under great fatigue with very little food. Amongst the twenty-five exhibitors from Portugal there were some very good common chemicals contributed by the General Chemical Society of Lisbon, the rest of the exhibition being made up of drugs and pharmaceutical preparations of an ordinary character. Rome contributed but little, the most remarkable article being a specimen of alum from the famous alum works of Tolfa. There were but twenty-two exhibitors from Russia, the only matters of interest being several specimens of birch bark oil and yolk of egg oil, which seems to be an article of commerce in that country. There were one or two good specimens of ordinary chemicals. Spain sent but little of interest, the chemicals of J. T. Cros, of Barcelona, appeared to be about the best exhibited.

Sweden exhibited several good specimens of both blue and green copperas from various factories. Lundstrom, of Jonkoping, the original inventor of the safety matches lately introduced into this country by Messrs. Bryant and May, sent specimens of this useful article, besides the ordinary matches which have made "Jonkoping" a household word in England. The only matters of interest from Switzerland were some pharmaceutical preparations by Gimpu and Co., of Zurich, and a few aniline colours from Müller and Co., of Basle. In the United States collection, Professor Parish exhibited a series of native American roots and drugs which served to illustrate, in the most interesting manner, the numberless contributions to pharmaceutical science made by this gentleman, and with most of which our readers are acquainted.

Turkey contributed a complete series of chemicals and drugs used in medicine in that country. These were collected and labelled with the greatest care, in four different languages, by Faik Pasha, a Turkish scientific chemist of eminence, and presented by him to the Pharmaceutical Society of Great Britain.

Our colonial possessions exhibited but little, as might be expected; chemistry and pharmacy both being the products of a high state of civilization. Ceylon sent a specimen of Dugong oil from that locality, contributed by Dr. McGrigor Croft. India sent several series illustrating the manufacture of opium, besides collections of native drugs and medicines from various parts. Several specimens of cod-liver oil were exhibited by Newfoundland, and Canada sent a number of pharmaceutical extracts, prepared with great care. Victoria sent several matters of great interest; amongst them were specimens of acetic acid from the wood of the *Eucalyptus*; an essential oil also from one of the *Eucalypti*, which can be obtained in any quantity, at a very small price. It has been tried as a perfume by Mr. Rimmel, who has scented some soap with a very small quantity of it. A specimen of Kauri gum, which appears to be one of the strongest vegetable astringents known, was also sent; and, to judge from the results of experiments lately made upon its use in pharmacy by several eminent men, it promises to play an important part as a curative agent.

Here ends our confessedly meagre account of the chemistry and pharmacy of the

Exhibition of 1862. It was our intention at first to have described the whole of the foreign contributions in detail, as we have done in the English department; but the exhibitors in France, Austria, the Zollverein, and other countries, were so numerous, that the space at our disposal would not have sufficed, had it been doubled or even trebled. We thought, therefore, under the circumstances, that we were acting for the best by treating the contributions of our own country with as much minuteness as possible, and giving merely a cursory glance at those of our foreign friends.

Now for results. The English chemists, both industrial and scientific, responded to the call made on them by Her Majesty's Commissioners in the most liberal manner, and spared neither time, trouble, nor expense in showing that England is the first chemical manufacturing nation in the world. In saying this we do not mean to deny that Austria, France, and the Zollverein, have not made great advances during the past ten years, but rather point to them as dangerous rivals that must be watched with jealous eyes, rivals that are gaining upon us every day. And why have they made these vast strides, let us ask? The answer is a simple one. They have not only sought the aid of the most eminent scientific men of the day, but they have educated themselves in the purely theoretical branches of chemistry until many of them take rank with the philosopher and the professor. They have thrown aside "rule of thumb," and by the light of science they have examined into the causes of failure constantly occurring, when this bad old rule was acknowledged. Hence their progress. Our progress has also been great from the same cause, as our own Exhibition has shown. There is not a branch in which they were good, in which we have not been better, or at least equal. In our three staple chemical manufactures—alkali, alum, and the coal-tar dyes, we have not only held our own, but we have shown that they cannot touch us. In colours Winsor and Newton's rainbow show of pigments was the admiration of the world, from the Royal Academician down to the country boy. In fine chemicals the contributions of Hopkins and Williams, Bolton and Barnett, and a host of others, showed that in this branch we could also keep a good place in the race, while in pharmaceutical preparations it would be hard to equal the fine examples shown by our leading men. Although we stand so well, let us take heed lest we fall. Let us always recollect that both science and labour are cheaper on the continent than in our own islands; and that there are many preparations which can be sold in our own market by foreigners at a higher rate of profit than that obtained by our own manufacturers. It must therefore be the endeavour of the British makers to make the best of everything that capital and the scientific training of workmen can accomplish. It was the special remark of many of the most eminent foreigners that visited the Exhibition, that the English chemicals and pharmaceutical preparations were especially distinguished by the care with which they were put up, by their perfect cleanliness and brightness, and more than all by their purity. This, then, is the ground upon which the foreigner is to be beaten—nay, we will go farther and say—will be beaten. In speaking so strongly as we do, our foreign friends must be perfectly well assured that it is done in all friendliness. Commerce is a hard struggle for supremacy, and often necessitates hard words, which are forgotten as soon as the market-gates are closed.

And now that our day's work is done, we will shake hands with our foreign brethren, or even embrace them, if such is the custom of their country, and tell them in what respect we *cannot* beat them. The nations which have contributed so largely and so well to the Exhibition in material things also sent amongst us something more—specimens of their *human produce*, noble fellows of all grades—philosophers, manufacturers, and workmen, with whom we had a hard battle to fight: a battle in which to be beaten was also to be the victor. In every foreign department we visited we met with the greatest kindness, civility, and unvarying attention from all concerned, from the chief commissioners down to the lowest servant, and one of the brightest remembrances connected with the glories of 1862 will be the perfect *entente cordiale* which so actively subsisted between the scientific men connected with the Exhibition from first to last.

SCIENTIFIC INTELLIGENCE.

Benzine Collas and Essence of Mirbane.—Many of our readers doubtless are acquainted with certain bottles labelled "Benzine Collas," and are perhaps not aware that the latter word is not part of the designation of the contained liquid, but the name of its manufacturer. Benzine—or, as we call it, benzole—is the starting-point in the preparation of nearly all the new red and violet aniline dyes. Discovered in oil-gas, by Faraday, in 1825, its history was further elaborated when Mitscherlich, a few years later, obtained it from benzoic acid; afterwards Hofmann detected it in coal-naphtha, whence Mansfield isolated it. Nitro-benzole, derived directly from benzole by the action of nitric acid, was discovered by Mitscherlich as far back as 1835; nevertheless, M. Collas did not hesitate, by means of a conspicuous placard in his case at the International Exhibition, to claim this distinction. He there states that he described his discovery in a sealed packet, deposited at the French Academy in October, 1848—just thirteen years too late to secure priority! But we do not scruple to say that his specimen of nitro-benzole, judging from its appearance, was the best of the numerous samples in the Exhibition. The excessive paleness of its straw-yellow colour would have led one to conclude it to be merely an imitative preparation, had not its high refractive and dispersive power, and its considerable density, as shown by the way in which the few drops of water present floated upon the surface, negatived such a supposition. Nitro-benzole is used in perfumery as essence of mirbane, chiefly for imparting to the cheaper kinds of scented soap an odour like that of essential oil of almonds.

Potash from Wool.—M. Maumené, a French Chemist, has recently showed that cold soft water would extract from sheeps' wool a kind of greasy soap, a combination of certain fatty and oily acids with the alkali potash—the remarkable fact being that the potash was almost free from that far more abundant alkali, soda. By charring this soap, and then extracting the residue with water, very pure carbonate of potash is obtained. The process is carried out on a commercial scale at Rheims, in the department of the Marne, and samples of the various products there obtained—potassa and its salts—were shown in the International Exhibition.

Formula for the Administration of *Sarracenia Purpurea*.—We have received the following interesting communication from Mr. Charles R. C. Tichborne, of Dublin:—It is desirable that we should possess such a mode of preparing each medication that it should combine the thorough extraction and preservation of its active principle, and also place it in our hands in an available form for administration. Some time ago I wished to prepare the tincture of *sarracenia*, and after looking over the researches on the subject, and also making several inquiries, I found that there were no published formulæ, except one, in the form of an infusion.* The largeness of the dose prevents the employment of the ordinary proof spirit in the making of a tincture, particularly as it would not be desirable to exhibit such large doses of alcohol in the disease in which it is said to be a specific. Under these circumstances, and as there seems to be some interest excited, I have no hesitation in suggesting the following formula, so as to place it in the hands of the medical profession in a convenient form, and that its reputed virtues as a specific in small-pox, &c., may be put to the test. I shall not touch upon the physical, chemical, or therapeutical properties of the plant, as I have no doubt Mr. Draper's forthcoming articles in the *Dublin Medical Press* will contain an epitome of all the reliable information to be procured upon these subjects; but I may as well state, *en passant*, that from experiments upon myself, the results, either from the administration of the roots or leaves, seem identical in connexion with their action upon the kidneys. The following formula is constructed, presuming that the average dose is about ʒiiss.; but if from experience it be found desirable to alter it, it will be only necessary to bear in mind that each fluid ʒss. represents ʒi. of the *sarracenia*. As the leaves form curiously tube-shaped cups, they become regular fly-traps; and it will perhaps be as well that they

* F. Morris, M.D., in the *American Medical Times*.

be torn open and the dirt and fragments of flies which will be found in them be sifted out before powdering :—

Take Purple sarracenia, ʒv.
Water a sufficient quantity.
Rectified spirits of wine, ʒiiss.

Coarsely powder the sarracenia, and pass it through a sieve the meshes of which are about one hundred and sixty to the square inch, moisten it with a little water, and pack lightly into a displacement apparatus, allowing water to percolate through as long as any amount of extractive matter is withdrawn. Evaporate this upon a water-bath to about fifteen ounces, add the spirit when cold, and sufficient water to make the whole measure one pint. The dose of this tincture or liquor will be from ʒss. to ʒvi. copiously diluted with water. Many who have received benefit from its administration are most sanguine as regards its efficacy, and as the active principle is soluble in cold water, I think the above preparation will give it a fair trial. I do not think it probable that we shall have to ask, with Horace,

“Amphora cœpit

Institui; currente rotâ cur urcens exit?”

The tincture will be found to keep, although the spirit will be about 82 per cent. under proof.

The following interesting notice has been gleaned from the French journals by Mr. William Procter, the accomplished editor of the *American Journal of Pharmacy* :—

Analysis of Chocolate.—M. Alfred Mitscherlich has found in 100 parts of Guyaquil cacao, 45 to 49 per cent. of butter; 14 to 18 of starch; 0.34 glucose; 0.26 cane sugar; 5.8 cellulose; 3.5 to 5 colouring matter; 13 to 18 albuminoid matter; 1.2 to 1.5 theobromine; 3.5 ashes; 5.6 to 6.3 water. *The proportion of starch is very considerable; it is a fact not to be overlooked by experts who find chocolate mixed with feculent substances. The colouring matter appears to be an altered product, because the fresh seeds are white. Theobromine is found in the shells of the cacao which contain one per cent. of their weight.*



United Society of Chemists and Druggists.—Bristol.—At a meeting of the members of this Society, recently held at the Swan Hotel, Bridge-street, William Herapath, sen., Esq., F.C.S., &c., was unanimously elected chairman, and Mr. W. Mitchell secretary of the Bristol district, and resolutions in accordance with the objects of the Society were unanimously adopted.

United Society of Chemists and Druggists.—Leeds.—On the 19th of November, a meeting, which was well attended, was held in the barristers' room at the Town Hall, Leeds, to hear from Mr. Cyrus Buott an exposition of the principles and objects of the “United Society of Chemists and Druggists,” the proceedings of which were inaugurated in London on the 23rd January, 1861. Mr. George Reinhardt took the chair, and said though he had retired from business, he was glad at any time to be of service to the trade if he had the opportunity.—Mr. Buott said the objects were to provide a fund for distressed members, a school for the education of their children, and to promote the general intellectual and social elevation of the trade. He argued that the trade stood in need of such an instrumentality, because at present it was powerless to resist the intrusion into it of any higgling huckster, however ignorant or degraded. Parliament had degraded them one step lower by refusing to acknowledge the right of the 45,000 chemists and druggists of England and Scotland to be exempted from serving on juries—a privilege which could be claimed by the members of the Pharmaceutical Society. The Society of Chemists and Druggists had Christian philanthropy for one of its leading principles; and it proposed to defend the rights of the trade, and to elevate the education of the young members. He moved a resolution approving of the principles of the society, and forming the meeting into a district association.—In reply to

Mr. Williamson, Mr. Buott said this society was not inimical to the Pharmacæutists, but it proposed to carry out measures which they had declined to carry into effect. He also said the Pharmaceutical Society had refused to open their doors to the admission of the trade generally.—Mr. Williamson said he knew that in the Pharmaceutical Society there was the greatest disposition to open the doors to all who should be admitted.—Mr. Yewdall seconded Mr. Buott's motion.—Mr. Reynolds said the Pharmaceutical Society spent £3,000 a-year upon education, and in the discharge of its central functions; and he believed it had done a great deal of good. He admitted that that society was open to many charges of indifference, but if such meetings as this succeeded in stirring it up to more energetic action, he thought they would have accomplished their great end—and he thought there should be an amalgamation of the two societies.—Mr. Yewdall showed that something should be done to give apprentices in the country the opportunity of acquiring a knowledge of botany by attendance at scientific lectures given for the purpose. After much conversation *pro* and *con*, the first resolution was carried. Mr. Reinhardt was then unanimously appointed president of the new district association, Mr. Yewdall the secretary, and the following gentlemen the committee:—Messrs. Hirst, Horsfield, Mills, Pickles, Rushworth, Stead, Aldridge, Bowman, Whiting, Williamson, and Reynolds (the last-named gentleman repeatedly saying, however, that he must decline to serve in that capacity).—Mr. Pickles moved a vote of thanks to Mr. Buott and those whom he represented for their strenuous efforts to obtain for the trade exemption from service on juries. It was carried unanimously, and soon after the meeting broke up with a vote of thanks to the chairman.

United Society of Chemists and Druggists.—Bradford.—A meeting of the trade was held on the 2nd inst., at the Talbot Hotel, to promote the objects of the above society, and to protest against the unjust limitation of the exemption clause in the Juries Act. Mr. Cyrus Buott attended as a deputation from the society. Mr. J. Boast was appointed to the office of local secretary for the Bradford district. Mr. Buott, at the request of the meeting, took the chair. The chairman said that he had held meetings in nearly all the principal towns, and the society in most of them had been successful. In Leeds, almost all the chemists and druggists in the town had connected themselves with it. The objects of their society might be epitomized into a fund for their poor, and a safe protection of their legal and trading interests. There were 45,000 chemists in the United Kingdom, and if each of those subscribed only a shilling towards the Benevolent Fund, they would enable the society to do a vast amount of good to the trade. In speaking of the infringements made on the trade, the chairman said that there were in Yorkshire 10,000 shopkeepers who dealt in drugs in which none but chemists ought to deal, and who shared their profits without sharing their responsibilities. Of this class 1,600 were in Leeds alone.—Mr. Buott then showed how unjust it was for Parliament to deprive them of their rightful claim of exemption from the jury list, and stated the determination of the society to persevere in their endeavour to obtain this privilege.—Mr. J. Boast moved that the chemists and druggists of Bradford now assembled approve of the principles of the United Society of Chemists and Druggists, and form an association to promote its objects.—This was seconded by Mr. Branson, and unanimously carried.—Mr. Newsholme moved that this meeting considers it to be the duty of all chemists and druggists to make provision for their poor, and pledge an annual public meeting on behalf of the benevolent fund.—The motion, on being seconded by Mr. Foster, was carried.—Mr. T. Stead moved that the meeting tender their thanks to the executive committee of the United Society for their strenuous efforts to obtain for them an exemption from serving on juries, and protest against the partial legislation which has limited such exemption to members of the Pharmaceutical Society as degrading and insulting to the trade.—This resolution, on being seconded by Mr. J. Harland, was unanimously carried.—In reply to those who were desirous of information as to the society's arrangements, Mr. Buott stated that the benevolent fund should amount to £500 before it could be available; and that all candidates for relief could have their cases investigated by the local committee, in order to determine whether they were deserving of assistance.—The business then terminated with thanks to the chairman.

Legal Intelligence.—Knight v. Jacobs and Another.—This was an action for libel, tried on the 29th ult., in the Bail Court, before Mr. Justice Crompton. The defendants pleaded a justification.—Mr. Huddleston, Q.C., and Mr. Prentice were counsel for the plaintiff; Mr. Coleridge, Q.C., and Mr. Lopes for the defendants.—The plaintiff is a chemist and druggist carrying on business at Alton, in Hampshire; and the defendants are the proprietors of the *Hampshire Chronicle*, published at Winchester, and the libel complained of was as follows:—"This town has been, during the greater part of the past week, the scene of one of those boisterous exhibitions of popular indignation, known as rough music. A certain knight of the pestle and mortar having taken it into his head

to maltreat his wife, pull her out of bed, beat her, and turn her out of doors in the night, a crowd of several hundred men and boys, armed with old tin cans, sheets of iron, and other noisy implements, paraded the streets, beating, groaning, and yelling, to the great annoyance of the quiet and peaceable inhabitants. It seems hard that if one party is so unmanly as to lift up his hand or his foot to a woman, and that woman his wife, the whole community should be outraged with impunity for several evenings together by such a hideous uproar." After the publication of the paragraph the plaintiff wrote to the defendants complaining of it, and asking to be informed of the name of the correspondent at Alton who had furnished the paragraph, considering it to have been written for the purpose of prejudicing him with the public. The defendants sent a reply, and offered to publish a copy of the proceedings before the magistrates. The plaintiff then consulted his solicitor, who wrote to the defendants and issued proceedings, and in the correspondence that ensued the defendants had offered to publish the plaintiff's version of the affair, and insert an apology, but it was not accepted. The plaintiff and several witnesses were called to prove the disagreements between him and his wife, and their separation. At the time in question the plaintiff's wife came, in his absence from business, to his house, remained there the whole day, and went to bed before he came home; that on his return he went to her, and insisted on her leaving. She accordingly got up, dressed herself, and left, but immediately re-entered by the shop-door, became very violent, broke the plaintiff's spectacles, and also his watch-chain. He was rather excited, and put her out of the house, but he used no more violence than was necessary. He denied pulling her out of bed, or striking her; and his female servant Gudgeon, who said she was listening, deposed that no violence took place between them in the bed-room. The plaintiff said he had been married to his wife twenty years, and they had had twelve children, but two only were now alive. They lived happily together for more than twelve years. It was the following night that the "rough music" assembled in front of his shop. He had never threatened his wife with a knife, or pulled or knocked her off her chair, but he threatened her once with an unloaded gun in a moment of excitement, which he afterwards regretted, relative to some socks. His wife told the servant to thrust them down his throat. (Laughter.) Mrs. Gudgeon said that after Mrs. Knight came to the house, she went into the cellar and opened a bottle of port, and drank some of it, and went to bed about two o'clock. She got up about five o'clock, and got a bottle of sherry, which she drank. She told the children who saw the bottle in her pocket that it was water. She went to bed again about half-past seven o'clock. When she came back into the shop she seized the plaintiff and shook him up.—Mr. Coleridge, for the defendants, regretted this case should have been proceeded with after their offer to apologize. As men of honour they were bound to stand by their correspondent, and as the plaintiff would go on, they were obliged to call the wife, and the plaintiff had only himself to blame for the exposure of his family squabbles and differences. He complained of the unmanly insinuation of drunkenness on the part of the wife.—Mrs. Knight was called—she said that plaintiff had on several occasions ill-treated her, and on one occasion he struck her when she was sitting in an arm-chair. On the day in question she went to his house for some money, and he was not at home. She was unwell, and made herself some arrowroot, into which she put a glass of wine, which was all she drank that day. She positively denied that she was intoxicated. She poured out a glass of wine for Gudgeon, but she would not drink it. She went to bed because she was unwell, and not from drunkenness. When her husband returned home he came to the bed-room, called her a b—— drunkard, pulled her out of bed, and said that if she did not leave the house he would murder her. She returned to the house because she could not get a bed elsewhere. In the morning he put his hands on her shoulders, placed his foot against her side, and pushed her down the steps. In the struggle she caught his watch chain, which broke. He afterwards came to her with a policeman, and charged her with stealing his watch. She denied it, and gave up the chain. She went the following day before the magistrate, but declined to prosecute on account of her children. In cross-examination she admitted telling the servant to push the socks down her husband's throat, but she afterwards regretted it. The jury ultimately returned a verdict for the plaintiff—Damages £100.

Sillen v. Holloway.—This case was tried before the Lord Chief Justice, on the first of the month.

The plaintiff is a Swedish physician, and the defendant is the well-known Professor Holloway, of the Strand.

According to the statement of the plaintiff, he entered into a contract with the defendant in the year 1860 to go to Paris and obtain a permission for the sale of the professor's pills and ointment, with liberty to advertise them in France and her colonies. For this, if successful, he was to receive 25,000*fr.*—£1,000 English currency. Dr. Sillen went to Paris accordingly, and began to make inquiries as to the best method of gaining

his object. While there he received a letter from the defendant in which he was instructed to direct all his energies to the ointment, because the pills would be objected to, and subsequently the defendant's brother told the plaintiff that if he obtained permission for the sale, &c., of the ointment he would receive half the promised reward. The plaintiff found that there were many obstacles in the way of the attainment of his object, and that an analysis of the ointment must be laid before the proper authorities. At his request the defendant sent him two pots, with instructions for the use of the remedy, which was to be rubbed into the skin "like salt into meat." An analysis was made and the ingredients found to be lard, butter, turpentine, white wax, and yellow wax. Eventually a patent was, as the plaintiff said, by extraordinary exertions on his part, obtained for the ointment under the title "Pommade dite Holloway," but the defendant refused to pay the £500, and Dr. Sillen now brought his action. A mass of correspondence was put in and a French lawyer called to prove that the *brevet* or patent produced would effect all that Mr. Holloway required.

For the defence it was said that a *brevet* was of no use to the defendant. The French law against secret remedies was relied upon. It was also urged that the *brevet* was taken out in Dr. Sillen's name, and for pommade, not ointment.

This morning, the Lord Chief Justice, on taking his seat, said that it appeared to him that the questions in the case were rather of law than of fact, and suggested that they should be argued before the Court.

After some conversation between Mr. Bovill and Mr. Brandt, it was agreed that some facts should be placed on his Lordship's notes. Mr. Holloway was called, and stated that his ointment contained three only of the ingredients mentioned in the analysis, but other vegetable matters not alluded to. He further said, in answer to questions put by Mr. Brandt, that he was not a chymist, and could not analyze his own ointment. He believed it was possible to do so, but very difficult.

A verdict was then entered for the plaintiff, with leave to the defendant to move the Court.—Verdict for the plaintiff accordingly.

Poisonings.—*By Wine of Opium.*—On the 29th ult. Dr. Lankester held an inquest at the Green Man, Potter's-bar, in the parish of South Mimms, touching the death of Rebecca Frances Collins, aged 54, and unmarried, who committed suicide by taking poison. Mr. Ernest Ringrose, M.D., of Potter's-bar, South Mimms, deposed to deceased being a visitor at his father's house. She had lived with his father's sister, Mrs. Fothergill, for very many years as companion. That lady died about three months since. Deceased took her death very much to heart. She went to bed last Tuesday night, about 10 o'clock, and witness heard her leave her room about 4 o'clock in the morning and return. She was missed at the breakfast table, and, on her room-door being found locked, witness, by means of a ladder, got in by the window. She was lying on the bed in a state of insensibility. On looking about, he found a bottle from the surgery, labelled "Vinum Opii." It was a 4 oz. bottle, and he believed it had contained about an ounce and a half to two ounces. He calculated it was equal to 40 grains of solid opium. He immediately used the stomach-pump, and that which was returned evidently contained the "vinum opii." He then got her off the bed, and kept her moving, and afterwards used galvanic electricity and stimulants, but she never became sensible. She at first had an emetic of sulphate of zinc. She died at three o'clock on Thursday morning. Maria Long, housemaid, gave evidence as to the state of deceased's mind and her excited manner, which she believed was owing to grief at the death of Mrs. Fothergill. She saw her on Wednesday morning going in the direction of the surgery, and afterwards found her door locked. The jury, believing that she took the poisonous draught while in an unsound state of mind, returned their verdict accordingly.

By Fusil Oil.—A serious fire, involving destruction of property to the amount of about £10,000, lately occurred at Messrs. Brown and Co's distillery at Dundalk. One of the soldiers called out to assist in extinguishing the fire has died, while three others are seriously ill, from having drank fusil oil, mistaking it for whisky.

Crimes and Misdemeanours.—On the 5th instant, John Ridgway, an elderly man, was charged on remand, at the Marlborough Street Police Court, with obtaining money from various noblemen and gentlemen by false and fraudulent representations. The Rev. Henry Egan, senior curate of St. George's Hanover-square, said, In September last the prisoner called on him and said he had received an injury while in the employment of the Board of Works. He had been promised 1*l.* by Lord Palmerston to assist in purchasing an instrument to support his injured shoulder, which was to cost 12*l.* The prisoner produced a bill for 12*l.*, purporting to be receipted by Mr. Lindsay, instrument maker, of Ludgate-hill. The prisoner said he had got 6*l.* towards the amount, and witness, believing his statement, told the assistant clerk, Mr. Evans, to pay him 6*l.*—Mr. Evans, assistant parish clerk, proved paying the prisoner 6*l.*, and receiving a receipted

bill for 12*l.*, with Mr. Lindsay's name at the head of it.—Mr. Lindsay, surgical instrument maker, said, some time back the prisoner called on him and said he had been sent by Dr. Ogle to him to ask what would be the cost of an instrument of the best kind for the injury to his shoulder. He made an examination and told the prisoner the expense would be 12*l.* The prisoner asked for a note to Dr. Ogle to that effect, and requested that a bill-head should be enclosed. The witness proposed to send his card, but the prisoner said a bill-head was wanted, and witness enclosed one. Shortly afterwards the prisoner called again, and said he wanted another bill-head, as the first one had been lost. Witness gave a second bill-head, and the prisoner went away. The two bills purporting to be receipted by him were forgeries.—Police-constable A 301, said, when he took the prisoner into custody he admitted that he made out the two bills because he could get the instrument cheaper.—The prisoner reserved his defence, and was sent for trial.

JUROR'S REPORT ON MEDICAL AND PHARMACEUTICAL PRODUCTS.

(Continued from page 333.)

Silver.—The great demand for the nitrate for photography has almost removed it from the department of pharmacy, and placed it in that of chemicals manufactured for technical purposes. The Jury have observed it in several collections, and have also noticed the caustic points of Messrs. Johnson and Son, which appear very well made.

Oxide of silver as a pharmaceutical preparation is displayed by two or three exhibitors.

II.—PHARMACEUTICAL PRODUCTS AND PREPARATIONS FROM THE VEGETABLE KINGDOM.

a. Vegetable Infusions, Decoctions, and Solutions.—Numerous specimens of aqueous infusions and decoctions in a concentrated form, preserved with a minimum amount of alcohol, are exhibited in the British section of the Exhibition. Many of these preparations, which display considerable pharmaceutical skill, would doubtless be found useful and convenient medicines; but the Jury can by no means admit that their employment in the place of freshly-made infusions would be a desirable innovation. Analogous to the proceeding, but in a still more concentrated form, may be mentioned the preparations known as fluid extracts, a considerable variety of which are used in North America, as may be seen by examining the specimens contributed by the Philadelphia College of Pharmacy, and by Mr. W. Saunders of London, West Canada. The only fluid extract in common use in England is that of sarsaparilla, a preparation containing about half its weight of extract of pilular consistence, together with a little alcohol. Several other fluid extracts are exhibited, as those by Messrs. Savory and Sons, which include fluid extracts of opium, taraxacum, rhatany, roses, sumbul, &c. These preparations are stated to contain about fifteen per cent. of glycerine.

Solutions of various medicinal substances in pure glycerine, called Glycerides, are shown by Mr. W. Dickinson of London, as convenient preparations for the external and internal administration of medicines. Among a considerable number we have observed the following:—Glyceride of aloes, of senna, of chloride of zinc, of bromide of iron, of iodide of sulphur, and of sulphuret of potassium.

b. Tinctures and syrups are shown in the collection of medicines exhibited under the auspices of the Pharmaceutical Society of Great Britain; there are also some preparations of this class contributed by Holland, Portugal, and Turkey.

c. Extracts and Inspissated Juices.—The collections of these preparations in the British section of the Exhibition appeared to the Jury for the most part highly commendable. Among those that were noticed with especial satisfaction, the extracts of Mr. Holland of Market Deeping, and of Mr. Ransom of Hitchin, may be cited. The Jury had also great pleasure in examining the extracts prepared by Mr. Squire, Messrs. J. Watts and Co., Messrs. Wright, Francis and Co., Messrs. Curtis and Co., and Mr. W. Hooper, all of London. But few pharmaceutical extracts have been sent to the Exhibition from abroad, which is probably due to the unattractive appearance of such preparations, and also to the fact that in Germany at least they are not manufactured on a large scale, but generally in the laboratory of each pharmacist. An Austrian exhibitor has, however, contributed a series of the extracts prescribed in the Austrian Pharmacopœia: the Jury have examined them, but have not been favourably impressed with them, as compared with similar products from English laboratories.

In France, extracts are extensively manufactured by M. Berjot of Caen, who exhibits

a large number. These extracts, which in appearance are entirely different from those of the British pharmacist, are prepared *in vacuo*, the evaporation being carried to complete dryness. Thus produced, we find them in the form of dry pieces, often several inches in length, and of an oblong form, very porous and light, and generally pale in colour. Extract of liquorice for instance, as shown by Mr. Berjot, is in extremely light and spongy, pale-buff, brittle, oblong cakes; in fact, in appearance it suggests pieces of dried froth. All the extracts are contained in wide-mouthed bottles, each provided with a hollow metallic stopper, ingeniously contrived to contain lime, the object of which is to absorb the humidity of the air necessarily admitted each time the bottle is opened. In fact they are mostly so hygroscopic, that, without some precaution of this nature, it would be impossible to maintain them long in their original condition; as evidence of which we may state that three or four of which we enclosed small specimens in pill-boxes, were found at the expiration of a few days to have shrunk to perhaps a tenth of their original volume, and to have assumed the form of ordinary soft extracts.

Of the care with which M. Berjot's extracts are prepared we entertain no doubt; but we are far from being convinced of the expediency of carrying the desiccating process to the highest extent, and of attempting to maintain the extracts in a perfectly dry condition for daily use. We think that such extracts present in general a very favourable condition for transport to other countries, being, we should imagine, susceptible of no change so long as they are kept dry. But upon the shelves of the dispensary, where a large business is carried on, we can imagine that they would, from their proneness to change, be a source of perpetual annoyance. Still as we are assured* that M. Berjot disposes commercially of his dry extracts to the extent of 4,400 lbs. (2,000 kilo.) annually, it appears evident that our objections have not all the practical force we should otherwise be ready to claim for them. Vegetable extracts, also prepared *in vacuo*, and reduced to dryness, but in a massive and not porous form, are shown by M. Menier of Paris.

Extract of liquorice is exhibited by several Italian, French, and Spanish manufacturers, amongst whom may be mentioned the house of Barracco, which produces 200,000 kilo. annually. Very good extract is also shown in the Austrian section by M. Quapill, to whom is due the merit of having introduced the manufacture of liquorice into Moravia.

Under the head of extracts it is proper we should also notice the substance called podophyllin, recently introduced from the United States into British medicine as an alterative and purgative. Podophyllin is prepared from the root of *Podophyllum peltatum*, L. (Ranunculaceæ) by exhausting it with alcohol, concentrating the alcoholic solution, and pouring it into water. The dark-greenish resin thus separated, constitutes, when washed and dried, podophyllin. The same process is said to be adopted in America for extracting resin from numerous other roots, as those of *Sanguinaria canadensis* L., *Veronica virginica* L., *Hydrastis canadensis* L., *Iris versicolor* L., &c. &c.

d. Essential Oils (medicinal).—The most extensive and remarkable collections are those contributed from Leipzig, where a very important manufacture of these products is carried on by the firms of Heine and Co., E. Sachsse and Co., and Schimmel and Co. Several of the oils exhibited by these houses were entirely new to most of the Jury. The essential oils of Dr. F. G. Geiss, of Aken-on-Elbe, near Magdeburg, of Dr. Wagner, Pesth, of Dr. Lamatsch, Vienna, and of Messrs. Boyer, Heil, and Co. of Gignac, Hérault, France, deserve commendation. In the British section the essential oils, though fewer in number than the foreign, are not less excellent. The principal exhibitors deserving mention are Mr. Holland, of Market Deeping, and Mr. Ransom, of Hitchin. The collections just named are those of manufacturers on a large scale; but numerous other specimens of more or less importance have also been observed by the Jury. Cajaput oil is sent from the Dutch East Indies, a sample also from New Caledonia, and one from New South Wales. Oils of peppermint and winter-green are contributed by the United States, and otto of rose by Turkey. There is also a sample of the essential oil with which otto of rose is adulterated, contributed by Mr. S. H. Maltass, of Smyrna: this oil, which we believe is now almost invariably mixed with the Turkish otto, is the produce of *Andropogon pachnodes*, Trin., a fragrant grass, abundant in the north-western provinces of India, and not, as sometimes stated, of a pelargonium. It is shipped from Bombay, whence it is carried to Turkey, partly by native traders by way of the Red Sea and Egypt, and partly by way of England. From its similarity in odour to the essential oil distilled at Cannes, in Provence, and in Algeria, from *Pelargonium Radula*, Ait. var. *roseum*, it is frequently sold under the name of "Turkish oil of Geranium."

e. Fixed Vegetable Oils.—Of these substances those alone which could claim the appellation of medicinal were considered to belong to our Jury, the remainder being referred to Class IV.

* "Bulletin de la Société d'Encouragement," t. viii. (1861), p. 143.

Castor Oil and Seeds.—The Exhibition contains numerous samples of this oil, of which those produced in Italy deserve particular attention. This castor oil is extracted from seed grown in the north of Italy, where the plant is doubtless an annual. That shown by M. Mazzuchetti, of Turin, appeared to be of excellent quality; the suite of specimens, including the seeds in various states, exhibited by Messrs. Valeri and Co., of Legnago, province of Verona, deserve mention. The latter firm are stated to produce by cultivation 2,000,000 kil. of seed annually. There are numerous other samples of castor oil seeds, more or less remarkable for their variation in size, colour, and markings, contributed by other countries, frequently accompanied by the oil. Those shown by M. Bélanger, director of the botanical garden at St. Pierre, Martinique, comprising half a dozen sorts, each with the botanical name of the particular species of *Ricinus* yielding it, would form an acceptable addition to any collection of *Materia Medica*.

f. Vegeto-Alkalies, their Salts, and other Crystalline Principles of Medicinal Substances.—In this department the Exhibition presents a display which is highly creditable to the progress of chemical knowledge, and its application to industrial purposes. Nor should it be otherwise when we reflect on the extraordinary attention which organic chemistry has of late received, the great diffusion of knowledge regarding its laws, and the numerous triumphs which in various directions it has achieved.

Vegetable alkaloids are contributed by England, France, Germany, Italy, Turkey, and Brazil, many of them as specimens of unequalled purity and beauty. To commence with the most important, we will notice those of cinchona bark.

Quinine.—The sulphate is exhibited by two English and several German, French, and Italian manufacturers. Many of the samples were chemically examined by the Jury, and were found in every case to be of satisfactory purity. The purity of a drug so important and high-priced as quinine ought to engage the attention of each pharmacist, who should rigorously refuse all which may not stand the required tests, nor should the medical man and the directors of hospitals exercise a less vigilant care. The use of quinine imperfectly purified is open to objection, for which the reduction in price by no means compensates. The admission of so valuable a medicine in a form acknowledged to be impure, and that without any standard by which to determine the amount and nature of impurity which are to be held allowable, affords opportunity for sophistication only limited by the principle or prudence of the manufacturers. In such a compound, the question must naturally arise: How much of this effect is due to the quinine, how much to the quinidine, and how much to the other constituents of this preparation? We think it would be altogether more scientific to discard such a substance, and to employ the cinchona alkaloids in those forms of purity in which they are now so easily obtainable.

The quinine salts exhibited are very numerous, and, we may add, very unnecessary, so far as medicine is concerned. The citrate, phosphate, hypo-phosphate, hydrochlorate, acetate, lactate, valerianate, tannate, kinate, picrate, and hydroferrocyanate are all to be seen.

Cinchonine and quinidine, and their salts, are also displayed in several collections; aricine and its sulphate, so far as we are aware, in only one—that of Messrs. Howards and Sons. This house also exhibits a specimen of the cinchonidine of Pasteur, and a very large one of its sulphate. Sulphate of cinchonidine is also contributed by Messrs. Dufour Brothers, of Genoa.

We may also here name as eminently worthy of notice (mainly as an indication of skill and patience) the extraordinary series of cinchona products displayed by Dr. Zimmer, of Frankfort-on-Maine. This series, which numbers about a hundred specimens, includes combinations of the cinchona alkaloids, quinine, quinidine, quinidine, cinchonine, and cinchonidine, with a great variety of acids, mineral and vegetable. It also includes, what are far more interesting, pure kinic acid, colourless and well crystallized, kinate of lime, pure cinchona-bark wax (a greenish-gray substance), the fatty acid of this wax in a pure state called cincho-cerotic acid (*Cincho-cerotin-säure*), dalleiochin, &c.

The chemical products of opium are extremely well represented by exhibitors from Great Britain, France, Germany, and Italy. M. Menier, of Paris, displays crystals of pure morphia which are the finest we ever saw, and his hydrochlorate of the same base is hardly less excellent. Codeine forms a striking object in the case of Messrs. J. F. Macfarlane and Co. of Edinburgh, whose specimen has the form of a large basin of crystals. Messrs. T. and H. Smith, of Edinburgh, Morson and Son, of London, and Menier, likewise exhibit good specimens of this alkaloid; but for magnitude of crystals there is nothing to equal that shown by M. Merck, of Darmstadt. Of the other principles contained in morphia, we may signalize the following as being remarkably well shown:—The narceine of Messrs. Morson and Son, meconine of M. Menier, papaverine, narcotine, muriate of thebaine, and meconic acid of Messrs. Smith: the last-named firm also exhibit a body named by them thebo-lactic acid, of which they claim the discovery,

but of which no account has yet been published. They also show two thebo-lactates, namely, those of copper and of morphia.

Strychnia.—The only British manufacturer on a large scale is, we believe, Mr. Hulle, who exhibits excellent specimens of the alkaloid and its salts. From the Continent we find strychnia contributed by M. Menier and Messrs. Laurent and Casthelaz, of Paris, and M. Merck, of Darmstadt. M. Menier, whose strychnia is in crystals of remarkable size and beauty, is also the exhibitor of a large specimen of igasurine, the only one we believe in the Exhibition. This alkaloid, which was discovered by Desnoix about the year 1853, is contained in nux-vomica, from the liquors of which, produced in the manufacture of strychnia, it may be separated after the precipitation of that alkaloid and the brucine by lime at a boiling temperature. From these aqueous liquors the igasurine, in an impure state, may be obtained by evaporation.* Igasurine is said to have medicinal powers of the same character as strychnia; but we are not aware that exact observations upon the subject have yet been instituted.

The collection of organic chemical products shown by M. Merck includes several substances of great interest and rarity, exhibited in very considerable quantities. Of such we may mention elaterine, of which there is a large specimen, well crystallized and perfectly white; also cubebene, delphinine, anemonine, sulphate of sabadilline and scoparine.

Atropine, now frequently used in the form of sulphate, for the dilation of the pupil, is shown by M. Menier.

Messrs. Morson exhibit the valerianate, a salt the use of which in medicine is very undesirable, on the ground that it is not only highly deliquescent, but that it constitutes a gummy mass which it is no easy task to weigh with accuracy. It is moreover impossible to believe that the alkaloid combined with valerianic acid can occasion effects which would not be produced by the sulphate, a salt presenting no such objections.

Aloine.—Messrs. T. and H. Smith, of Edinburgh, to whom is due the discovery of aloine in 1851, exhibit it in the form of a mass of brownish-yellow crystals, which are not without beauty. Crystals of aloine, in great abundance, occur in a variety of Socotrine aloes, imported a few years since, which was in a semi-fluid condition, the evaporation not having been carried to the usual limit. In the aloes in question, the aloine subsides in the course of time to the bottom of the vessel as a yellow mass, the supernatant aloes being dark and transparent.

Aconitine, both amorphous and crystallized, is shown by Messrs. Morson and Son. The aconitine of these manufacturers is well known for its superiority in virulence, a fact which enables it to command a very high price. Messrs. Hopkin and Williams are also English manufacturers and exhibitors of this alkaloid.

Bibirine and its sulphate are contributed by Merck of Darmstadt, and Macfarlane of Edinburgh. A sample of the sulphate (now not unfrequently prescribed in London) is also sent by Mr. Knowles, of Demerara, from which colony the Bibiru Bark is an export.

Santonine, which has come into extensive use since the Exhibition of 1851, is chiefly manufactured in Germany. Messrs. Böhringer and Sons, of Stuttgart, who prepare it on a very large scale, exhibit one of the numerous excellent samples submitted to the Jury.

Pereirine.—This alkaloid is exhibited by Messrs. Ezequiel Correa dos Santos e Filho, Messrs. Aleixo Gary and Co., and Mr. Peckolt, all of Brazil; and is also to be found in the case of one English exhibitor. Its history dates from 1839, when it was discovered by Blanc, of Rio Janeiro,† in the bark called in Brazil Pao Pereira, and valued in that country as an excellent febrifuge and tonic. This bark, the origin of which has long remained uncertain, has recently been ascertained by Dr. Allemão, of Rio Janeiro, to be derived from *Geissospermum Vellozii*, Allem., a tree of the order Apocynaceæ. Pereirine is obtained by exhausting the pereira bark with acidulated water, and treating the concentrated liquor with ammonia, which throws down the impure alkaloid. This may be rendered pure by re-resolution in an acid, treatment with charcoal, and precipitation by ammonia. It then constitutes a pale brown, pulverulent substance, which has not hitherto been obtained either colourless or in crystals. It is soluble in alcohol or ether, restores the blue of reddened litmus, unites with diluted acids to form neutral salts, which are mostly soluble in water or alcohol, but which, like the base, have only been obtained in an amorphous condition. An aqueous solution of a salt of pereirine is coloured deep crimson by strong nitric acid; a reaction which takes place even when the solution is dilute. We are not aware of any ultimate analysis of this alkaloid having been made.

g. Vegetable Acids.—Tartaric and citric acids are so well and extensively represented

* Gerhart, "Chimie Organique," vol. iv. (1856), p. 182.

† Berzelius, "Jahresbericht über d. Fortschritte d. Chemie et Mineralogie," 23 Jahrg. (1844), p. 372.

in all parts of the Exhibition, that we may be excused from mentioning the samples of any particular manufacturer.

Of racemic acid, a specimen by Wagenmann of Vienna is shown in the Austrian Court.

Valerianic acid, in three forms—anhydrous, monohydrated, and trihydrated—is contributed by Dr. Marquart of Bonn, who likewise sends fine succinic and malic acids, both colourless and pure.

Galic and tannic acids are freely exhibited. One specimen, that of gallic acid, shown by Messrs. Dunn, Heathfield and Co. of London, is remarkably beautiful for its crystallization.

Caincic acid, extracted from Cainea root (*Radix Chioceœ anguifugæ*, Mart.), is among the rare products shown by Mr. Merck.

A. Unmanufactured Drugs of Vegetable Origin.—In the British section of the Exhibition there is a numerous collection of these products exhibited by various contributors, chiefly under the auspices of the Pharmaceutical Society of Great Britain. The samples are mostly very fine; some of them in fact almost too good, as they represent exceptional rather than usual forms of the drugs they illustrate.

The British colonies, including India, contribute large collections of vegetable *Materia Medica* which will repay careful study. The colonial possessions of France are also well represented, the suites of specimens from each being admirably arranged and clearly catalogued upon one general plan. We also find contributions of raw drugs from the South American Republics, Brazil, the United States, West Africa, Turkey, China, Japan, and the Philippines.

As it would unduly extend the present Report were we to attempt a detailed account of these numerous collections, we shall restrict ourselves to name a few of the more important, and also to mention in addition a few drugs which claim notice on the ground of recent introduction to European medical practice.

North American drugs are illustrated by a very excellent and numerous collection contributed by the Philadelphia College of Pharmacy. There are also numerous well-preserved specimens forwarded by Mr. William Saunders of London, Canada, and by Mr. Giroux of Quebec.

To H. E. Faik Pasha of Constantinople, the Exhibition is indebted for a very extensive series of specimens of raw products, alimentary, medicinal, &c., from Turkey, amongst which the numerous samples of opium deserve particular attention.

Mr. Sidney H. Maltass of Smyrna is also the exhibitor of a fine series of opium, besides scammony, tragacanth, and some other drugs of Asia Minor.

M. Bélanger, director of the Botanic Garden at St. Pierre, Martinique, contributes an instructive series of West Indian drugs, which the Jury consider well deserving of commendation.

Mr. Theodor Peckolt, pharmacien of Cantagallo, Brazil, has sent a collection of small specimens of Brazilian drugs which deserve the attention of pharmacologists.

Dr. Welwitsch, who has recently returned from a visit of several years to the Portuguese territories on the west coast of Africa, contributes numerous remarkable raw products collected during his journeys in those little-known regions; but the specimens being neither catalogued nor well arranged, are not displayed as they deserve.

The productions of Hungary, including a few well-preserved drugs, are displayed in the collection of Mr. Vincent Jankó, of which a convenient separate catalogue is published.

The great project of introducing the *Cinchona* into India receives an illustration from two or three inconspicuous jars containing cinchona bark, produced upon the plantations of the Dutch Government in Java, contributed, together with botanical specimens of *Cinchona Calisaya*, Wedd. and *C. pahudiana*, How., by Dr. Junghuhn.

Of the drugs which have to a greater or less extent come into use during the past few years, we may mention the following:—

Resin of Scammony-root.—The rude methods employed for the collection of scammony, and the extreme variability of that drug, induced Mr. Clark, an extensive manufacturer of extract of liquorice, residing near Smyrna, to suggest the advantage that would arise from replacing it by the pure resin obtained by a suitable process from the dried root. Mr. Clark not having in Asia Minor the requisite appliances for such a pharmaceutical operation, some of the root was forwarded to Professor A. W. Williamson of University College, London, who, after various experiments, recommended the following process:—The roots, previously crushed, are to be boiled first with water and afterwards with diluted acid, by which means they will be deprived of all matter soluble in those menstrua, while the resin will be left undissolved. They are then to be treated with alcohol, and the alcoholic solution being evaporated the pure resin will remain. Numerous comparative trials of this resin have been made in the hospitals of London,

and have established the conclusion that it is quite equal in medicinal activity to the best scammony. The substitution of resin of scammony-root for scammony is not, however, officially sanctioned, and the new drug has as yet met with but little demand.

Root of *Actæa racemosa*, L. (Ranunculaceæ).—This drug which has for many years had a place in the *Materia Medica* of the United States, has recently come into considerable use in England as a remedy in rheumatism, particularly in its acute forms; it has also been successfully employed in chorea, nervous headache, hysteria, &c. As a complete account of the drug, its natural history, mode of administration, &c., by Professor Bentley of London, has been recently published,* we think it unnecessary to enter into further particulars respecting it.

Kamala is the Indian name of a brick-red powder, which consists of the minute glands rubbed from the capsules of *Rottlera tinctoria*, Roxb., a tree occurring in many parts of the East Indies. It is employed in medicine as a vermifuge, and is very effectual in the dose of one to two drachms; it may also be given in the form of tincture. Kamala has been imported into London to a considerable extent, and chiefly shipped to the Continent.

Bark of *Larix Europæa*, DC.; Larch bark.—It has been recently recommended as a stimulating expectorant, and has been prescribed by a few medical men in London and Dublin, in the form of tincture and extract. The bark, which contains numerous cells filled with resin, has an agreeable terebinthinous odour; whether it possesses any real advantage over the numerous terebinthinous remedies already in use, may well be doubted. We may mention, however, that a crystallizable volatile principle, to which the name *larixinic acid* has been given, has recently been obtained from larch bark, which at present is its only source; also that the bark contains a peculiar form of tannin.†

Guaco.—Attention has been recently called to the medicinal effects of the stems of certain species of *Aristolochia*, commonly known in South America by the name of guaco, and there used against the bites of venomous serpents. The drug is quite distinct from the stems of *Mikania Guaco*, H. B. K., also called guaco in some parts of New Granada. A good specimen, derived from *Aristolochia trilobata*, L., is sent from Trinidad by Mr. Sylvester Devenish of that island.

Bark of *Cerasus Virginiana*, Michx., is employed in the United States as a tonic and sedative, and has recently been introduced to the notice of medical men in this country. It contains a bitter principle not yet isolated; also amygdalin, together with a substance analogous to emulsin, which, reacting on each other in the presence of water, yield hydrocyanic acid and a volatile oil resembling that of bitter almonds.‡

Bark of *Ulmus fulva*, Michx., a North American tree, is remarkably mucilaginous, and of an agreeable odour. The infusion is a good demulcent, and recommended in dysentery and strangury. The bark is also sometimes chewed as an expectorant, and in a bruised state may be used for poultices. It probably possesses no advantage over linseed, marshmallow, or other common drugs of the same class.

Anacahuite wood, a drug of unknown origin imported from Tampico, and extravagantly valued in Germany for a short time as a remedy for consumption. Experience has not confirmed the favourable statements first put forth regarding it, and it is now almost unsaleable. Chemical experiments have failed to detect in it any constituent that can explain the good effects alleged to have been obtained from its administration.

Dried herbs are well exhibited by Messrs. Butler and McCulloch of London, as well as by Mr. Holland of Market Deeping, and Mr. Ransom of Hitchin. There are also some very good samples shown by Mr. Benzon of Copenhagen, and Messrs. F. Wilhelm and Co. of Vienna. M. J. G. Cavalli of Gothenburg exhibits some medicinal herbs excellently dried in a compressed form. The Jury are not acquainted with the process adopted for obtaining the extreme compactness and beautiful appearance for which the specimens are remarkable.

III. PHARMACEUTICAL PRODUCTS FROM THE ANIMAL KINGDOM.

Cod-liver Oil.—The Exhibition contains many samples of this important medicinal agent, contributed by Newfoundland (including the French islands of Saint Pierre and Miquelon), Norway, and England. The pale oil manufactured in London is much esteemed, but the supply is by no means equal to the demand, and an immense quantity of foreign oil is also consumed. This pale oil is prepared by a process originally devised by Mr. Donovan of Dublin,§ which consists in placing the perfectly fresh livers in a

* "Pharmaceutical Journal and Transactions," for March, 1861.

† Stenhouse, "Proceedings of the Royal Society," June 28, and July 10, 1861.

‡ Wood and Bache, "Dispensatory," Ed. ii. (1858), p. 627.

§ "Dublin Journal of Medical Science," vol. xvii. (1840), p. 357.

metallic vessel, and heating them with constant stirring to a temperature of 180° F., by which treatment they break down into a uniform, pulpy, liquid mass. This mass is immediately transferred to calico bags, whence the oil drains out; after filtration while still warm, it is sufficiently pure for use. In this state the oil contains, at the temperature of 60° F., a considerable deposit of stearine, which is the practice of some pharmacutists to remove by filtration, but of others to allow to remain, under the idea that the stearine (which is perfectly fluid at the temperature of the human body) is no less efficacious than the oleine. The cod-liver oil of Mr. Peter Möller of Christiania is prepared by a process essentially the same as that just described.

Dugong Oil.—This oil is produced from the bodies of two herbivorous cetaceous animals of the family Manatidae, the one *Halicore Dugong*, Illig., an inhabitant of the Indian seas, the other *H. Australis*, Owen, occurring off the north-west coasts of Australia. It has been lately employed as a substitute for cod-liver oil, especially in Australia. Samples from that colony, and also from Ceylon, afforded, we presume, by the two species of *Halicore* above named, have been sent to the Exhibition. That from Ceylon is a solid white fat, almost devoid of odour; those from Australia are liquid oils containing a deposit of stearine; all have a slight tallow-like taste, and but little smell.

Dugong oil, having no fishy smell and taste, is supposed to offer an advantage in these respects over cod-liver oil. We are not aware that any extensive trials of it have as yet been made in Europe.

Pepsine.—There are two English exhibitors of this substance, namely, Messrs. Morson and Son, and Mr. J. L. Bullock, and one Austrian, Dr. Lamatsch. Mr. Squire, as the agent of M. Boudault of Paris, may also be named, though we think he does not display any specimen.

Messrs. Morson, who prepare pepsine from the stomachs of calves, exhibit it in the pure state as a grey extractiform mass: it is not, however, commonly sold in this form, being more convenient when reduced to a powder with starch, in which state it has received the name of *Poudre nutritive*. M. Boudault's pepsine, which, as we gather from his pamphlet, is prepared from the stomachs of sheep, is also mixed with starch. Mr. Bullock's pepsine is prepared from the stomach of the pig, upon the principle, we believe, that the pig's omnivorous habits render it probable that its gastric fluid would supply the best substitute for that of the human stomach. However this may be, Mr. Bullock's pepsine may well be superior in strength, as it is sold in an unmixed state. Dr. Lamatsch, as it would appear from his advertisement, employs the stomachs of both pigs and calves for the preparation of pepsine, which, like that of Mr. Bullock, is offered for use unmixed with starch.

The remaining articles of animal *Materia Medica* call for but few observations. The common blistering flies (*Cantharis vesicatoria*, Fabr.) are well shown among the productions of Hungary. *Mylabris Cichorii*, Fabr. (and *M. Sidæ*, Fabr.?) the best source of cantharidine, occurs among the drugs of India; a specimen of *Lytta vittata*, Fabr., in the collection of the Philadelphia College of Pharmacy, and one of *Meloe maiialis*, L., among the drugs of Spain.

Cantharidine is represented by a very large and fine sample from the laboratory of M. Merck; Messrs. T. and H. Smith likewise exhibit it.

Of ambergris a fine mass may be noticed in the case of a Paris perfumer, M. Claye.

Musk is not well shown, though it would have been easy in London to display a series of specimens representing it in all its varieties. Of civet, there is a solitary and bad specimen sent from India. *Castoreum* is shown by a Canadian exhibitor, as well as in the collection of the Pharmaceutical Society.

Having endeavoured in the foregoing pages to present to notice those objects which more particularly claimed our attention, to communicate the information which was furnished respecting them, and to reproduce some of the observations which were made during the numerous discussions of the Jury, it is necessary that we should offer a few concluding remarks.

Pharmacy, as a distinct art, can rarely claim any great discoveries; and its advancement, of which we think the present Exhibition affords satisfactory evidence, is largely due to the increased knowledge which the labours of the scientific and manufacturing chemist have brought to bear upon it. Although we cannot but admit the importance of the services which chemistry has rendered, and is constantly rendering to the art of pharmacy, it is interesting to observe that even in those departments in which the pharmacist has to rely more upon his practical experience than upon his theoretical knowledge, we are not without evidences of progress. Organic chemistry, indeed, has advanced during the last eleven years with rapid strides, producing among its many useful results not a few from which medicine can derive advantage. The collections of active principles of vegetables in the present Exhibition have been observed by the Jury

with the greatest interest. The magnitude and purity of the specimens exhibited indicate manufacture on a large scale, which in its turn is evidence that the substances shown are prepared not merely for exhibition, but actually for sale.

Much of the improvement which British pharmacy has undergone is due to the Pharmaceutical Society of Great Britain; it is not, indeed, too much to say that the exertions of this body during the past twenty years have contributed more than any other cause to raise the character and improve the attainments of the pharmacutists of this country. Nor is improvement confined to Great Britain or even to Europe; it is, on the contrary, observable in the exhibitions of every country; and although pharmacy is but a small area for art and science, and can afford but an indifferent criterion whereby to judge of national progress, we think that its development, as evinced by the present Exhibition, is not without value as an indication of the advancement of science, and of the diffusion of the arts of civilization dependent upon it.



THE SUGGESTED ALTERATIONS IN OUR JOURNAL.

Bath, December, 1862.

SIR,—As you invite expressions of opinion upon the proposed suppression of your Price Current, and on the enlargement of your Journal, I beg to record my vote *against* the first proposition, and *for* the second.

As to the first point, the suggestion of J. V. S. is both unfair and unnecessary. It is unfair that 40,000 persons should be deprived of a legitimate advantage, however slight or even illusory J. V. S. may consider it, for the problematical, or if not problematical, then invidious gain of some 40 houses. And it is unnecessary, inasmuch as every man knows that if he buys only retail quantities, as *e.g.*, 1 lb. of ergot or 1 oz. of oil of patchouli, he must submit to pay retail prices; while, if his trade enables him to take—say a chest of gum, a canister of bergamot or a case of castor oil, he can buy, after all incidental charges and credit are estimated, at an advance on the sale prices not much exceeding a brokerage commission. Contrary to J. V. S.'s assertions, my own experience goes to show that a Price Current is *not* offensive to respectable houses, and that it *is* useful to the retailer,—not indeed as an authoritative standard of prices, but as a guide and indication of the basis upon which actual price is founded; to say nothing of its utility as an index to the fluctuations of the market. I know that many subscribed to the Journal, in the first instance, solely for the sake of the Price Current.

Next, as to the enlargement of the CHEMIST AND DRUGGIST, which, up to the present time has been so judiciously and effectively conducted, that it only needs an advance in the same direction to make it the unquestioned organ of the trade, and ultimately a valuable property to its pro-

prietors. Now, looking at the amount of your advertisements, and considering that you get the *net* price for the copies (after deducting postage), without having to submit to the deduction of about 30 per cent. for passing them through the bookseller's hands, why can you not give us 48 pages for 6s. per annum? A net receipt of 5d. per No., especially when paid in advance, is very nearly or quite equal to a price of 8d. as published in the usual course, and an 8d. periodical of 48 pages is in these days no extraordinary feat. Rather more space for correspondence,—not too promiscuous or diffuse, for it is the most restless, not the most able men who are most eager to rush into print; something in the shape of a "Notes and Queries;" together with such notices of foreign transactions, &c., as you suggest, and occasional descriptions of interesting manufactures, would make the work additionally interesting to subscribers, and raise its character and importance in the periodical world. Not forgetting, however, to keep its quality up to the present standard, and not to weight its pages with such dreary details as load the pages of a kindred journal. Above all, keep it interesting, *interesting*, INTERESTING. Wishing you all success in your undertaking,

I am, sir, &c.

F. E. P.

[Our correspondent's calculations would be fair enough if the *Chemist and Druggist* had anything like the circulation of a journal taken in by all classes. He cannot know how small the profit on each number really is—*Ed. C. and D.*]

Liverpool, November 18th, 1862.]

SIR,—I have perused the communication from your correspondent "J. V. S.," and cannot refrain from thinking that the argument introduced is very shallow and vague,

being evidently based more upon personal interest than general public good. To "deny its utility chiefly on the ground that it only reports monthly the actual sales which have been effected," is to deny us one of the most important and useful informations our Journal conveys, and deprive us of the very criterion by which we judge the state of the market; for where do we find a wholesale London house that will report to us even monthly, unless we reside in the Metropolis, and even then, their report will be still subject to the fluctuations of the market and consequently open to the very discrepancy which has proved so "offensive" to your correspondent? No, sir, to suppress the "Price Current" from the CHEMIST AND DRUGGIST would be to suppress the leading article from the "London Times," and when we consider that a very large majority of your subscribers are retail and dispensing Chemists, we cannot submit to any dictation or encroachment which tramples upon the liberty and utility of a Journal supported and claimed by ourselves.

I consider the "Price Current" a most valuable appendage to our Journal, being more defined, and bringing under our notice much valuable information which we should never obtain through the medium of the wholesale list, therefore I trust that, under any revision which may take place, the "Price Current" will always retain its wonted place.

I am yours, &c.,

C. J. T.

Cardiff, November 17th, 1862.

Sir,—As you distinctly invite the opinions of the trade to which I belong, as to the suppression of the monthly Price Current, I venture to reply. If there are no sounder reasons for its discontinuance than are given by your correspondent, J. V. S., I think it certainly might be retained. This gentleman speaks of it as the most objectionable feature in your Journal, what the lesser objections may be we are left to conjecture. The opinion expressed carries weight not of itself generally so much as on account of its source—and who speaks? A wholesale Druggist. The CHEMIST AND DRUGGIST is not published in the interests of wholesale dealers, but to conserve and promote those of retail Chemists, which are to the former of an essentially diametric character in many respects; and should we then listen to the interested advice which commends the amputation of our tails? But to the reasons of this advice. It is offensive to the seller and is useless to the buyer,—how can these conditions co-exist? If it is really useless to the buyer, how can it offend the seller, unless he be so sensitive a philanthropist that he is moved by the inconvenience and loss to

which his customer is subject in paying for a space now so uselessly filled, which might easily be made so instructive to him? As a buyer, I find that these Prices Current tabulated inform me at a glance how low or how high the price of any article has been in the course of a certain period, and thus assists me very materially in forming an approximate idea of when I should or should not buy; which information I could not otherwise get at unless I regularly attended Mincing Lane. The instance J. V. S. gives of his buying a parcel now which rises daily in value from the date of his purchase, affords no very trenchant reason. The fair and intelligent buyer will for the very reason that he is such admit the advance at once, and a little firmness on the part of the seller will generally effectually combat intelligence and candour inferior to his own. There are few circumstances that so develop a man's character as his way of conducting his commercial affairs; and it is certainly a greater boon to the seller to know the true character of his customer than the capability of avoiding his questions, or of obtaining an additional shilling from him occasionally. Whether these Prices Current are published or not there will always be a certain number of individuals, who imagine that any number of other individuals, other than themselves, can live on the loss they sustain by selling. Let these Mawworms be developed, let them be once known as such, and they will soon all naturally gravitate to the fostering care of those emasculate dealers, who cannot or dare not withstand an unreasonable demand. Then those houses whose character is of the right stamp will have weeded out their lean kind, and derive the advantage of dealing with men of known intelligence and liberality, and who also will have the compensating favour of knowing whether or not they in their turn are dealing with fair and honourable men. Individually I know when I ask a fair price and often find it objected to, but that if I firmly and decisively adhere to it I seldom lose a customer; whereas if I ask a low price waveringly being uncertain whether I am quite right, my customer takes the fancied alarm and either pays unwillingly or not at all. All this is quite consonant with our nature, and more or less affects us all, for who of us driving a bargain would not drive an uncertain and hesitating seller when he would readily close with a man who evidently knew what he meant and what he intended to do. By discontinuing these lists J. V. S. says you gain the good will of many whose good will is of little or no service to you, and will offend none by adopting his advice. I am ready to accept his first proposition, but am equally disposed to controvert the second, giving a qualified sense to his word "offend." J. V. S. admits

that the trade reports are faithfully prepared, but asserts that that portion of them which forms the price list is necessarily misleading. I have not been able to detect this discrepancy between them, for to withhold the price lists is to withhold the standard. I read in this month's number that Gum Anime sold at easier prices, Olibanum was cheaper, and Arabic steady, how am I to know at what price the first is to be considered "easy," the second "cheap," or the third unsteady, without the price lists? J. V. S. knows perfectly well that to follow his advice might be to gain his good will by retaining a trade report which it has rendered practically useless, and occupying so much of that space which he feelingly says "might be advantageously filled with READABLE matter." He evidently means to be slyly facetious, for certainly his improved reports would be quite unreadable.

Provided that by increasing the bulk of your journal you provide me a corresponding increase of that "readable matter," which is monthly shelved, I am, for one, quite disposed to pay a higher price, and add to that "intense satisfaction" which your "clever correspondent Hibernicus" quickened this month, when he told you that for stuff of quality so good, your price was absurdly low. Oh that my customers were all equally "clever," for I think it might indirectly tend to my own "intense satisfaction."

I am, sir, &c.

RODRETTA.

Hackney, November 29th, 1862.

SIR,—You ask for your subscribers' views respecting the "Price Current," &c. For myself and several others I say, let the space be occupied with matter *more useful* to the trade; keep "the Report." The Price Current will do very well for the wholesale, but not for us. The printed lists now so generally sent out by the trade prevent overcharges. Would not the space be more usefully occupied by giving a series of articles upon adulterations, and how to detect them, either microscopic or by test? The increase in price I doubt would be an injury to your circulation; 6s. per annum, with enlargement in proportion would not be objected to, above that price, I think would be.

Yours respectfully,

BENJ. ARBITT.

Mayfield, Sussex, November 8th, 1862.

SIR,—I think that your suggested alterations of size and price of the CHEMIST AND DRUGGIST Journal is both necessary and desirable. As an individual member I should suggest that the journal be published at 10s. per year instead of 5s., payable quarterly, half-yearly, or yearly, to suit the convenience

of subscribers (in advance). With regard to the Price Current, it certainly is a great convenience, not so much as a check to the wholesale Druggist, as it is to giving the Chemist an idea how the markets are, so that he may judge as to the quantity to buy and when to buy it. In large towns there are always several travellers from wholesale houses in the course of the year, so that Chemists may see by the different Price Lists how the markets stand. But in a country village such as this there is only one London wholesale Druggist that travels through here, and then only twice a year, consequently your Price Current is a great convenience to me, and have no doubt to a great many more in a similar situation.

I should not trouble you with this letter if you had not invited the Chemists and Druggists to give their opinion.

I am, sir,

Yours obediently,

EDWD. A. WHITE.

Dawlish, November 19th, 1862.

SIR,—It has been for some time past my opinion that your journal should aim to be something more than a "Monthly Trade Circular;" there is, I am sure, plenty of room for enlargement, and I very much mistake if the Chemists of England would refuse any consequent reasonable charge, provided this journal justly and efficiently represented their interests.

I beg to remain, with best wishes,

Yours obediently,

H. LLOYD.

November, 1862.

DEAR SIR,—I for one was pleased to see a proposition started, having for its aim an increase in the size and usefulness of your, I was almost going to say our, periodical. I have been for some time halting between various opinions wishing for a journal which, taking a somewhat wider field of observation on scientific things connected with our trade, would also notice as you do the latter itself; for I think no true Chemist and Druggist can ignore either his profession or his trade. If he has not research enough in him to master many of the secrets connected with the science of the profession, nor versatility enough to turn from these, and understand and supply the wants, perhaps of a thoroughly illiterate person, or it may be, of a child scarcely acquainted with its mother-tongue, he is not worthy of the combination of honour and usefulness suggested by the union of the designations of "Chemist and Druggist."—I confess to an ardent desire to see our status, both as a body and as individuals worthily uplifted, and our sphere of usefulness extended, not so much by class restrictions, and combinations, or

fixing of prices, as by thoroughly humane and open-hearted conduct towards each other, and towards our clients, and by the possession of knowledge and ability sufficient or more than sufficient to throw back with effect the attempted sarcasms of certain parties who have just enough knowledge of theory and technicality to quarrel among themselves, while they have ill-nature enough to slander all without their own pale. Permit me in conclusion to ask and to offer. For several years I was not occupied as Chemist and Druggist, since the last four or five years I have again become one. In this latter space I have learnt to read both French and German with very considerable ease and rapidity. Will you be kind enough to name title and price of what you may judge the best Chemists and Druggists' periodical in either of or both of these languages, and if you should decide upon making an increase in size, and a few pages or articles from such a source would be acceptable to you, I would willingly translate for the

CHEMIST AND DRUGGIST.

I enclose my card, although not necessary for publication.

192, Sherlock-street, Birmingham,
November 25th, 1862.

SIR,—As you wish to have the opinion of your subscribers to the CHEMIST AND DRUGGIST respecting the suggested alteration, I beg to give my thoughts on the subject.

I certainly should be very sorry to see the Price Current expunged from the CHEMIST AND DRUGGIST, as I have always considered that it makes the CHEMIST AND DRUGGIST of more value especially to those Druggists residing in the country. I am not surprised at J. V. S. wishing to have the Price Current suppressed, as I suppose he thinks it opens the eyes too much of his customers, especially to those who may confine themselves to him. I do not suppose there are many who take the CHEMIST AND DRUGGIST who think they can buy at the prices quoted, but I think the information given by your monthly table is very important. If any article should advance in price very much, a Druggist having a large stock of that article might take advantage of the rise. To those Druggists who do a little in the wholesale way, the Price Current is invaluable. No doubt you will receive a great number on the subject which will enable you to come to the right conclusion. As in the first instance you commenced the CHEMIST AND DRUGGIST for the benefit of all, I have no fear that you will publish it in the future for the benefit of the few.

The other suggested alteration requires some reflection before it is carried out, as

of necessity if the journal is enlarged, the price must also be increased. Is it well to increase its price again? Since its commencement it has been doubled in price now after two years it is to be again advanced, we may expect Hibernicus or some one else in a short time, may wish something more to be added, and then there must of course be another advance. There are some Chemists and Druggists who have plenty of money and a first-rate business, but I dare say you are aware that the greater number are not at all wealthy, and the returns so small, that they cannot afford to pay much, and to that class I think your excellent publication is of great service, as they cannot so well afford to purchase more expensive publications, as the more wealthy can. For this reason, I think it is desirable to keep the price as low as you can for the sake of the many, but of course if the majority are for it, the minority must give way. I think if you had said what the additional price would most likely be, we should have been better able to judge. Wishing you may be able to come to a right conclusion,

I remain,

Yours truly,
THOMAS MILLER.

Ramsbottom, November 18th, 1862.

DEAR SIR,—With reference to the suggested alterations, my opinion is that the CHEMIST AND DRUGGIST will have less interest as a Trade Journal, if you suppress the Price Current. I, for one, am very much pleased with that part of your journal. You know very well that no one but those in the trade has the opportunity of taking it in, and you always say at the commencement of your Current, that the prices you quote are the prices in bulk, and your subscribers are so foolish as to suppose that they can get smaller quantities at those prices. I expect you will not give in to what anybody advances that is interested financially and in a private capacity, except there is a universal trade opinion in favour of what you give into. As to the size and price being increased, I most certainly should like to see the circular enlarged, but you must bear in mind that if you increase the price very much, you will also lessen the number of subscribers. So my opinion is that if you omit the Price Current or increase the price up to above 7s. 6d. per annum, you will most certainly have taken a step in the wrong direction.

Yours, &c.,

ANTI-HIBERNICUS.

UNITEATE PORTIS.

Westminster, November, 1862.

SIR,—When I first read the letter or "J. C." I was glad that his efforts had been

rewarded, especially as another journal had refused publicity to his opinions, I suppose on account of his condemning that which many of its subscribers approve, but sorry that so much talent had been expended on a subject which can never be remedied by advice, exposure, or declamation; and now that I find your pages of this month's number filled with letters on the same subject, I am sorry that the strength there displayed is not given to promote the general well-doing of the Druggist, instead of railing at individuals on an insignificant question.

I differ with those who think that because some Chemists having no connexion or position to uphold them, court chance custom with cheapness, that the trade is going down; and am of opinion that whilst some keep up their prices and character for selling pure drugs, they may treat with indifference their neighbours who are retailing inferior articles to their own prejudice. I am satisfied that if any man upholds his quality, he need not trouble about his neighbour, "for 'tis poverty, not their will consents;" and so long as assistants are treated as mere shopmen, and receive their miserable £30 per annum, there will be a continual increase of little cutting down shops to worry and annoy the old established and well-to-do; the proprietors naturally preferring freedom, such as it is, and a crust, to servitude in poverty and fetters.

It is useless reviling our unfortunate brethren, when by using our endeavours, we might raise our standard and preserve our liberties. The United Society is labouring to protect the Druggist from pharmaceutical persecution and restrictive legislation, and it needs the strength of the trade to back it. If there was any spirit in the fraternity it would sink local grievances in the common good, and unite as one, to support that committee which is doing so much for it. These are days of free trade, and your journal is its advocate. If one man thinks he can do business best by cheapness, let him enjoy his opinion. I believe those who differ will succeed in the end. The instances which "J. C." records of the "Magnates of the West End enjoying such extensive patronage," whilst others round about them are underselling, is certainly no proof of the trade declining. There will always be some of the public running after cheapness, as also others knowing that the only way to get genuine medicine is by paying a good price. If there are two kinds of demand, there must be two modes of supply.

The divisions of trade are so altered, that 'tis useless to complain, because one, to obtain a living, sells paint, pens, and lucifer matches, or to grumble because by selling pomade and cosmetic, the draper infringes more on the hairdresser than the Druggist.

Chemists not basking in the rays of medical prescribers, must get a living somehow, and in the sunny districts of Bayswater and Belgravia no physician will recommend his patients to these shops in the "general line." Let orthodox and high price Chemists "stick to their stalls," and rest assured that if a copy of "J. C.'s" letter was nailed to every counter in the kingdom, it would not influence the cheap-Jack system; for whilst it is necessary to puff and undersell to prevent a return to servitude, it will be continued.

That I am no advocate for cheapness the enclosed portion of my counter bill will show*, but on the contrary do all I can to discountenance it, and I am desirous that those interesting themselves in the welfare of the trade should act in concert with the committee in Bell-yard, and if J. C. has not already put his shoulder to the wheel, and received the certificate of the United Society, the sooner he and others do so, the earlier will they be able, by district meetings, to put a stop to that which now seems their aversion. And when another privilege, such as exemption from juries appears in our grasp, do not let us be quarrelling over old bones, whilst the P.S. steps in and carries off the meat.

Yours, &c.,
AN OUTSIDER.

SIR,—Knowing as I do that a very large number of the Chemists and Druggists are often too poor to subscribe even to such a useful journal as your trade circular, I feel convinced that should you determine to advance the price, it must very materially affect your circulation. If you cannot afford to give us more matter for the present price, I should suggest, before commencing another volume, that you carefully review the past and see if some of your space cannot be economised. For my own part, I cannot see of what practical value the column of figures in the price current under 1861 can be. As a tradesman who is anxious to get the most for my money, I invariably turn to the column under '62; occasionally I may cast my eye on '61, but if I do it is mere idle curiosity. By leaving out that column of figures you would save space that might be devoted to more useful matter. I also think that some of the articles enumerated could very well be dispensed with; if space permitted it would be very easy to name a great number. Trusting you will consider the above hints,

I am, yours truly,
LUNAR CAUSTIC.

* Genuine Drugs of the best quality only are used, and sold in this business, at as small a price as will allow. The public are cautioned against cheap Physics, and as their recovery depends upon the quality of the Medicine, they are advised that the lowest prices are not always the cheapest.



In Chemicals there has been rather more doing during the past month, but in most cases lower prices have been submitted to. A fair demand has been experienced for Tartaric Acid, and several sales made at 1s. 7d. to 1s. 7½d.; there is also more demand for forward delivery. A large business has been done in Citric, and about 100 tons sold at 1s. 6d. to 1s. 6½d.; now makers ask 1s. 6¾d. to 1s. 7d. spot and forward. Upwards of 250 kegs Iodine have been sold at 4d. to 4½d., now the price is 4½d., but somewhat quieter. Oxalic Acid is dull at the quotation of 8d. to 8½d. Prussiate of Potass is quiet at 12d. to 12½d. Bichromate is slow at 7¾d. to 8d. Chlorate of Potass is dull and lower, but sales were made at 13½d. Small sales of Sal Acetos have been effected at 10½d. Soda Ash is quiet at 2d. to 2½d. Soda Crystals are quiet at 95s. to 97s. 6d. ex ship. A good business has been done in Lump Alum at £7 to £7 5s., and makers are full of orders. Bleaching Powder is dull at 9s. to 9s. 6d. Flour of Brimstone is quiet at 12s. to 12s. 6d. A good business has been done in Cream of Tartar at £5 15s., now the price is £5 17s. 6d. to £6. Sulphate of Copper is quiet and easier, small sales at 32s. Sal Ammoniac is quiet at 38s. and 36s. No change in Canada Ashes. Turpentine is again lower, and only small sales; the last prices paid were, for French, 85s. to 87s., and American, 110s. Common Rosin is also lower—French, 20s. to 21s., and American, 27s. to 27s. 6d. Extensive sales were made at the end of last and the commencement of the present month in Petroleum, and the prices advanced from 19s. for crude and 2s. 6d. for refined, to 25s. for the former, and 3s. to 3s. 3d. for the latter. The market has since become quiet, and quotations are now 23s. for Pennsylvania crude, and 3s. for refined. Linseed Oil, after declining to 38s. on the spot, is now better; the last sales made were at 38s. 6d. spot and 37s. 6d. in Hull. Rape is steady, foreign brown 47s. 6d., and refined 50s. to 51s. Saltpetre, after declining, has again recovered, and the market closed at from 42s. to 42s. 6d. crude, and 6s. for refined.

At the Drug sales which have been offered during the past month, a fair extent of business has been done. About 500 boxes Castor Oil sold, part at 6½d. to 6¾d. for good pale, being fully ¾d. per lb. lower. Small sales of Oil Aniseed have been made, at 5s. 7d., which is 2d. cheaper. A few cases Oil Cassia sold at 9s., which is also 2d. lower. Several parcels of New Spanish Saffron have arrived and sold at 36s., which is a much lower price, and now there are no further buyers thereat. A large parcel of China Rhubarb arrived, and sold readily at lower prices, prime flat 4s. 8d., and round 4s. 4d. to 4s. 5d. Cape Aloes are 2s. to 3s. dearer, and good qualities are in demand; at the late sales good brought 50s. to 51s., and inferior down to 44s. per cwt. Some fine Turkey Opium sold at 20s. to 21s., which was dearer; but at the late sales 19s. was accepted for good, with little demand. Gum Tragacanth is lower, and only small sales.

PRICE CURRENT.

These quotations are the latest for ACTUAL SALES in Mincing Lane. It will be necessary for our retail subscribers to bear in mind that they cannot, as a rule, purchase at the prices quoted, inasmuch as these are the CASH PRICES IN BULK. They will, however, be able to form a tolerably correct idea of what they ought to pay.

	1862.			1861.				1862.			1861.		
	s.	d.	s.	d.	s.	d.		s.	d.	s.	d.	s.	d.
ARGOL, Cape, pr ct.	85	0	100	0	95	0	100	0					
French	40	0	0	0	60	0	85	0					
Oporto, red	45	0	47	0	45	0	0						
Sicily	70	0	78	0	65	0	80	0					
Naples, white	65	0	80	0	65	0	80	0					
Florence, white	80	0	97	6	90	0	100	0					
red	50	0	85	0	85	0	87	6					
Polygna, white	110	0	116	0	115	0	120	0					
ARROWROOT,													
duty 4½ per cwt.													
Bermuda .. per lb.	1	2	1	8	0	11	1	4					
St. Vincent	0	4	0	7	0	2½	0	5½					
Jamaica	0	4½	0	6	0	2½	0	4					
Other West India.	0	4	0	5½	0	2½	0	3½					
Brazil	0	2	0	3	0	1½	0	2					
East India	0	2½	0	4	0	1½	0	2½					
Natal	0	4½	0	9½	0	2½	0	6					
Sierra Leone	0	3	0	3½	0	2½	0	3					
ASHES .. per cwt.													
Pot, Canada, 1st sort	34	6	0	0	39	0	0	0					
Pearl, do. 1st sort.	34	6	0	0	35	0	40	0					
BRIMSTONE,													
rough .. per ton	135	0	137	6	160	0	0	0					
roll	200	0	220	0	270	0	280	0					
flour	245	0	250	0	315	0	340	0					
CHEMICALS,													
Acid—Acetic, pr lb	0	4	0	0	4	0	0	4½					
Citric	1	6½	1	7	1	9	1	10					
Nitric	0	4	0	5	0	3½	0	4					
Oxalic	0	8	0	8½	0	8½	0	10					
Sulphuric	0	0½	0	0	0	0	0	0					
Tartaric crystal	1	7	1	7½	1	8½	1	9					
powdered.	1	7½	0	0	1	9	0	0					
Alum .. per ton	140	0	145	0	130	0	135	0					
powder	0	0	0	0	150	0	0	0					
Ammonia, Crb. lb.	0	5½	0	6	0	5½	0	6					
Sulphate per ton	290	0	310	0	260	0	290	0					
Antimony, ore	200	0	230	0	320	0	340	0					
crude, per cwt	24	0	28	0	26	0	20	0					
regulus	43	0	43	6	50	0	51	0					
French star	43	0	0	0	48	0	0	0					
Arsenic, lump	17	6	18	6	17	0	18	6					

CHEMICALS.
Arsenic powder
Bleaching Powder
Borax, E. I.
British
Calomel
Camphor
Copperas
Cresol
Green
Iodine
Magnesia
Muriatic
Muriatic
Orange
Pish. Nickel
Chloride
Hydric
Prussic
Precipitate
Prenon
Rose Pink
Sil-Acetone
Ammonia
Fosco
Glauber
Soda Ash
Bicarbonate
Crystals
Sgr. Lead
Sulphate
Sulphate
Verdigris
Vermilion
Vitr. M
COCHINEAL
Hondur
Mexican
Lima
Turmeric
DRUGS
Aloes
S
C
Am
Am
Am
Am
Bals
Bar
Per
Bo
Ba
Ca
Ca
Ca
Ca
Ca

PRICE CURRENT—continued.

		1862.			1861.		
CHEMICALS.		s.	d.	s.	d.	s.	d.
Arsenic powder ..		6	6	..	7	0	8
Bleaching Powder.		9	0	..	10	0	8
Borax, E. I. refined		52	6	..	0	0	0
British.....		50	0	..	52	0	64
Calomel.....per lb.		2	9	..	3	0	2
Camphor, refined.		2	9	..	3	0	2
Copras, grn. pr. ta.		65	0	..	0	0	65
Crsiv. Sublmt. lb.		1	11	..	2	0	1
Green Euclid. pr. lb		0	9	..	0	11	0
Brunswk. cwt.		14	0	..	42	0	14
Iodine, dry, pr. oz.		0	44	..	0	44	0
Magnesia Crbn. ct.		42	6	..	45	0	42
Calced, lb.		1	6	..	0	0	1
Minium red, pr. ct.		22	6	..	23	0	22
orange.....		33	0	..	35	0	35
Ptsh. Bichrom. lb.		0	74	..	0	84	0
Chlorate.....		1	17	..	0	0	1
Hydriodate oz.		0	5	..	0	5	0
Prussiate .lb.		1	0	..	1	0	1
red.....		2	1	..	2	2	2
Precipit. red pr. lb		2	9	..	2	10	2
white....		2	9	..	2	10	2
Prussian Blue....		1	6	..	1	6	1
Rose Pink....pr ct.		29	0	..	30	0	29
Sal-Acetos. pr lb.		0	104	..	0	0	0
Ammoniac, ct.		36	0	..	38	0	32
British.....		8	0	..	8	6	8
Epsom.....		5	0	..	5	6	5
Glauber.....		0	2	..	0	24	0
Soda, Ash, pr deg.		12	0	..	12	6	12
Bicarbonate. ct.		0	0	..	0	97	0
Crystals per ton.		37	0	..	0	0	37
Sgr. Lead, white, ct.		25	0	..	0	0	28
brown.....		7	0	..	7	3	6
Slphite. Quinine oz		6	6	..	6	9	5
British in bttl.		14	6	..	15	0	14
Foreign.....		1	2	..	1	4	1
Sulphit. Zinc. cwt.		2	8	..	3	1	2
Verdigris.....lb.		2	2	..	2	2	2
Vermilion, English		32	0	..	33	0	35
China.....		2	2	..	2	4	2
Vtrl. blue or Roman		2	8	..	2	7	2
per cwt.		32	0	..	33	0	35
COCHINEAL, pr. lb.		2	8	..	4	2	2
Honduras, black..		1	4	..	3	4	1
silver....		2	7	..	3	0	2
Mexican, black....		2	6	..	2	7	2
silver....		2	8	..	3	2	2
Lima.....		2	8	..	3	2	2
Teneriffe, black..		2	6	..	2	7	2
DRUGS.		130	0	..	200	0	120
Aloes, Hepatic, ct.		180	0	..	430	0	150
Socotrine.....		45	0	..	51	0	38
Cape, good.....		26	0	..	440	0	20
inferior.....		60	0	..	420	0	60
Barbadoes.....		30	0	..	35	0	35
Ambergris, gray.		20	0	..	35	0	20
per oz.....		98	0	..	115	0	65
Angelica Root, ct.		19	0	..	38	0	22
Aniseed, China str.		1	3	..	0	0	1
Gernau, &c.....		1	6	..	1	6	1
Balsam Canada, lb		5	0	..	5	5	4
Capivi.....		4	3	..	4	6	3
Peru.....		23	0	..	440	0	24
Tolu.....		1	0	..	2	4	1
Bark Cascarilla ct.		4	0	..	4	3	3
per lb.....		3	0	..	3	3	3
Calisaya, flat....		3	0	..	3	3	3
quill.....		1	3	..	2	6	1
Carthageana....		1	10	..	2	9	1
Pitayo.....		2	6	..	7	6	2
Red.....		22	0	..	440	0	22
Bay Berries, pr ct.		0	24	..	1	6	0
Bucca Leaves, lb.		40	0	..	75	0	40
Camomile Flowers		200	0	..	0	0	180
Camphor, China..		19	0	..	440	0	19
Canella Alba....		2	8	..	2	10	2
Cardarides, pr lb.		7	0	..	7	4	4
Cardamoms. Mlbar.							
good.....		7	0	..	7	4	4

DRUGS.	1862.			1861.						
	s.	d.	s.	d.	s.	d.				
Cardamoms, inferior	6	0	..	6	11	4	0	..	4	9
Madras.....	3	2	..	5	10	3	4	..	4	9
Ceylon.....	4	9	..	5	0	4	0	..	4	6
Cassia Fistula pr ct.	15	0	..	60	0	13	0	..	23	0
Castor Oil, 1st pale, lb	0	64	..	0	7	0	64	..	0	61
second.....	0	64	..	0	64	0	54	..	0	51
infr. & dark	0	6	..	0	64	0	54	..	0	51
Bombay, in csk.	1	2	..	0	0	0	5	..	0	5
Castorum.....	1	2	..	26	0	1	0	..	28	0
China Root, pr ct.	10	0	..	15	0	9	0	..	10	0
Coculus Indicus.....	10	0	..	12	0	14	0	..	15	0
Cod-liver Oil, gal..	4	2	..	6	0	4	9	..	6	6
Cleynth. apple, lb.	0	8	..	1	0	0	8	..	1	2
Colombo Rt. pr ct.	15	0	..	48	0	15	0	..	48	0
Cream Tartar, pr ct.										
French.....	117	6	..	120	0	125	6	..	127	6
Venetian.....	120	0	..	122	6	130	0	..	0	0
grey.....	112	0	..	115	0	115	0	..	120	0
brown.....	105	0	..	110	0	105	0	..	110	6
Croton Seed.....	45	0	..	65	0	90	0	..	105	0
Cubebs.....	120	0	..	125	0	135	0	..	140	0
Cummin Seed.....	34	0	..	36	0	50	0	..	56	0
Dragon's bld. reed.	200	0	..	320	0	200	0	..	240	0
lump.....	90	0	..	300	0	170	0	..	200	0
Galangal Root.....	26	0	..	32	0	20	0	..	23	0
Gentian Root.....	21	0	..	32	0	19	0	..	0	0
Guinea Graius,										
per cwt.....	47	0	..	50	0	48	0	..	52	6
Honey, Narbonne.	60	0	..	84	0	60	0	..	85	0
Cuba.....	24	0	..	36	0	28	0	..	36	0
Jamaica.....	26	0	..	75	0	30	0	..	80	0
Ipecacuanha, pr lb.	7	3	..	7	6	6	0	..	6	9
Isinglass, Brazil..	0	10	..	3	10	0	9	..	3	10
East India.....	0	9	..	3	0	0	6	..	3	2
West India.....	3	0	..	3	0	3	0	..	3	9
Russian.....	9	6	..	13	0	11	6	..	13	0
Jalap.....	1	0	..	5	0	1	6	..	4	9
Juniper Berries, cwt.										
German & Frsch	8	0	..	9	0	9	0	..	10	0
Italian.....	8	0	..	10	0	10	0	..	12	0
Limon Juice, pr deg.	0	04	..	0	0	0	04	..	0	1
Liquorice, per cwt.										
Spanish.....	83	0	..	90	0	83	0	..	90	0
Italian.....	85	0	..	95	0	85	0	..	95	0
Manna, flaky.....	2	0	..	2	6	2	6	..	0	0
small.....	1	6	..	1	9	1	6	..	1	9
Musk.....per oz.	20	0	..	28	0	20	0	..	35	0
Nux Vomica.....	8	0	..	9	6	8	0	..	9	6
Opium, Turkey....	15	0	..	20	0	15	0	..	15	6
Egyptian.....	7	0	..	13	6	6	0	..	12	6
Orris Root, pr cwt.	26	0	..	28	0	27	0	..	29	0
Pink Root, per lb.	3	0	..	8	3	1	9	..	2	2
Quassia (lit. wd) ton	90	0	..	110	0	70	0	..	80	0
Rhatania Root, lb.	0	9	..	1	3	0	9	..	1	0
Rhubarb, China, rnd.	1	9	..	4	8	1	8	..	3	2
flat.....	2	2	..	4	8	3	0	..	3	6
Dutch, trmd.....	5	0	..	5	6	3	0	..	3	6
Russian.....	11	6	..	16	0	11	6	..	0	0
Saffron, Spanish..	34	0	..	36	0	35	0	..	37	0
Salep.....per cwt.	150	0	..	170	0	170	0	..	190	0
Sarsaparilla, Lima	0	10	..	1	5	0	10	..	1	3
Para.....	0	9	..	1	2	0	10	..	1	3
Honduras.....	0	8	..	1	4	0	11	..	1	6
Jamaica.....	1	1	..	2	3	1	8	..	2	3
Sassafras.....per cwt.	11	0	..	12	0	12	0	..	13	0
Scammony, per lb.										
virgin.....	27	0	..	34	0	23	0	..	34	0
second.....	14	0	..	24	0	14	0	..	24	0
Seneka Root.....	0	14	..	0	4	0	2	..	2	4
Senna, Calcutta....	0	14	..	0	2	0	14	..	0	2
Bombay.....	0	24	..	0	6	0	2	..	0	3
Tinnevely.....	0	4	..	1	2	0	24	..	1	2
Alexandria.....	0	3	..	0	6	0	4	..	0	6
Snake Root.....	2	3	..	0	0	1	8	..	1	9
Spermacti, refined	1	0	..	1	1	1	0	..	1	1
Squid.....	0	1	..	0	2	0	1	..	0	0
Tamarinds, E. Ind.	10	0	..	13	6	9	6	..	13	0
W.I. per cwt.....	18	0	..	36	0	15	0	..	32	0
Valerian Root, Eng	20	0	..	40	0	20	0	..	40	0
Terra Japonica....										
Gambier, cwt....	21	0	..	21	6	17	0	..	17	9
Cutch, cwt.....	23	0	..	24	0	24	0	..	25	0

PRICE CURRENT—continued.

	1862.			1861.			OILS.			s. d. s. d.			s. d. s. d.		
	s.	d.	s. d.	s.	d.	s. d.		s.	d.	s. d.	s. d.	s. d.	s.	d.	s. d.
DRUGS.							Citronel.....	0	7 1/2	0	7 1/2	0	4 1/2	0	5 1/2
Vanilla, Mexican lb	25	0	.55	0	20	0	Clove	0	1	0	0	4	0	0	0
Wormseed, pr cwt.	2	0	.00	0	2	0	Croton	0	0	0	0	0	3	0	4
GUM. per cwt.							Juniper per lb.	1	10	3	0	1	10	4	0
Ammoniac, drop.	100	0	120	0	70	0	Lavender	2	6	4	6	2	6	5	0
lump	15	0	.65	0	15	0	Lemon	4	0	9	6	5	0	10	6
Animi, fine pale ..	220	0	230	0	290	0	Leomgrass, pr oz	0	6 1/2	0	7	0	5 1/2	0	6
bold ambe ..	200	0	220	0	260	0	Mace, ex	0	1 1/2	0	2	0	1 1/2	0	2
medium	170	0	180	0	170	0	Neroli	5	0	7	0	6	0	9	0
small & dark ..	100	0	125	0	100	0	Nutmeg	0	1 1/2	0	2	0	1 1/2	0	2 1/2
ordinary dark ..	40	0	.89	0	50	0	Orange per lb.	5	0	6	6	6	6	7	0
Arab. E. l. palepkd	52	0	.59	0	52	0	Otto Roses, per oz	14	0	24	0	16	0	25	0
unsortd, good to f	32	0	.48	0	35	0	Peppermint, pr lb.								
red and mixed ..	20	0	.30	0	28	0	American	8	6	13	0	7	6	13	6
siftings	0	0	.00	0	18	0	Rhodium per oz.	33	0	34	0	33	0	38	0
Turkey, pkd, gdt to f	115	0	110	0	110	0	Rosemary per lb.	3	9	3	0	3	9	6	0
second & inftr.	30	0	.40	0	30	0	Sassafras	3	0	3	6	3	6	4	6
in sorts	26	0	.23	0	24	0	Spearmint	5	0	9	0	5	0	12	6
Gedda	40	0	.50	0	30	0	Spice	1	3	1	6	1	3	1	6
Barbary, white ..	27	0	.23	0	26	0	Thyme	1	9	2	3	1	9	2	6
brown	28	0	.30	0	16	0	PITCH, British, pr cwt.	12	0	0	0	7	0	0	0
Australian	30	0	115	0	16	0	Swedish	0	0	0	0	10	6	0	0
Assafoet. fr. to gd.	30	0	115	0	16	0	SALT PETRE, pr cwt.								
Benjamin, 1st, qual.	400	0	580	0	360	0	Engl, 6 p. c. or under	38	0	39	6	42	0	42	6
2nd qual	280	0	400	0	160	0	over 6 per cent.	37	0	37	9	39	0	41	6
3rd	50	0	190	0	60	0	Madras	35	0	37	6	38	0	39	0
Copal, Angola red.	95	0	100	0	100	0	Bombay	32	0	36	6	34	0	36	0
pale	85	0	100	0	95	0	British-refined ..	42	0	42	6	45	0	46	0
Benguela	0	7	1	6	0	7	Nitrate of Soda ..	13	6	14	0	13	6	14	0
Sierra Leone ..	20	0	.38	0	12	0	SEED, Canary, pr qr.	40	0	.56	0	50	0	.60	0
Manilla prct ..	42	0	.50	0	36	0	Caraway, Eng. p. c.	0	0	0	0	23	0	.25	0
Dammar plc. pr ct	100	0	120	0	140	0	German, &c	0	0	0	0	0	0	0	0
Galbanum	140	0	210	0	140	0	Coriander	0	0	0	0	15	0	.17	0
Gunbge, pkd. pipe	80	0	120	0	80	0	East India	0	0	0	0	0	0	0	0
in sorts	0	6	1	6	0	7	Hemp	0	0	0	0	44	0	.46	0
Guaiaicum .pr. lb.	260	0	280	0	100	0	Linseed, Black Sea	60	6	.61	6	60	0	.62	0
Kino per cwt.	34	0	.36	0	19	0	Calcutta	63	0	.66	0	62	0	.64	0
Kowrie	5	0	5	3	6	0	Bombay	63	0	.70	0	67	0	0	0
Mstic, pkd. pr lb.	160	0	200	0	160	0	Egyptian	58	0	.69	0	58	0	.60	0
Myrrh gd & fi pr ct	70	0	150	0	70	0	Mustard, brn, p. bhl	7	0	.12	0	8	0	.13	0
sorts	65	0	.67	6	56	0	white	7	0	.8	6	8	0	.9	0
Olibanum, pl. drop	45	0	.64	0	44	0	Poppy, E. l. pr qr.	59	0	0	0	59	0	.60	0
ambr & yel	10	0	.30	0	12	0	Rape, English	0	0	0	0	0	0	0	0
mixd. & dk.	40	0	.44	0	42	0	Danube	73	0	.74	0	0	0	.70	0
Senegal	80	0	105	0	75	0	Calcutta, fine ..	65	0	.67	0	63	0	0	0
Stradac	180	0	320	0	180	0	Bombay	66	0	.67	0	68	0	.66	0
Tragacanth, leaf.	100	0	130	0	100	0	Teel, Sesame or Gngy	65	0	.70	0	64	0	.71	0
in sorts	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Cotton per ton	180	0	0	0	150	0	160	0
OILS. per tun.	43	0	.47	10	35	0	Gnd. Nut Kernels, tn	330	0	0	0	340	0	350	0
Seal	88	0	.90	0	87	0	SOAP, Lind, yel. pr ct.	21	0	.36	0	21	0	.36	0
Sperm, body	43	10	.49	0	40	0	mottled	34	0	.36	0	34	0	.36	0
Cod	0	0	0	0	0	0	curd	50	0	0	0	50	0	0	0
Whale, Greenland.	43	0	.44	0	35	0	Castile	38	0	.40	0	37	0	.40	0
8th Sea pale	38	10	.39	0	30	10	Marseilles	40	0	.41	0	40	0	.41	6
E. l. Fish	61	0	.62	0	60	0	SOY, China, per gal.	2	6	2	8	2	1	2	8
Olive, Galipoli, ton.	1	0	1	2	20	0	Japan	0	10	1	0	0	8	0	10
Florence, 3-chst.	57	0	.57	6	50	0	SPONGE, Turk f. pkd	20	0	.24	0	20	0	.26	0
Coccat. Coch. tn	53	6	0	49	6	0	fair to good	3	0	.78	0	9	0	.18	0
Ceylon	48	0	.54	6	45	0	ordinary	3	0	.6	0	3	0	.8	0
Sydney	48	10	.49	10	42	0	Bahama	0	4	1	3	0	3	1	0
Ground Nut & Gin.	50	0	.51	0	44	0	TURPENTINE,								
Bombay	41	0	.41	10	45	10	Rough .. per cwt.	0	0	0	0	22	0	0	0
Madras	39	5	0	0	35	5	Spirits, English ..	0	0	0	0	0	0	0	0
Palm, fine	49	10	0	0	45	0	American, iusks	110	0	0	0	68	0	.65	0
Linsced	47	0	.47	10	43	0	WAX, Bees, English	172	0	175	0	165	0	170	0
Rapeseed. Engl. pale	50	10	.51	0	46	0	German	162	6	180	0	160	0	165	0
brown	47	10	0	0	43	0	American	165	0	175	0	180	0	200	0
Foreign do	47	10	0	0	43	0	white fine	0	0	0	0	200	2	215	0
brown	49	0	.50	0	55	0	Jamaica	165	0	175	0	180	0	190	0
Lard	40	0	.41	0	39	0	Gambia	170	0	177	6	180	0	0	0
Tallow	13	6	.23	0	0	0	Mogadore	120	0	160	0	125	0	150	0
Rock Crude	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	East India	140	0	170	0	150	0	170	0
Oils, Essential—	19	0	0	0	19	0	ditto, bleached ..	170	0	220	0	180	0	210	0
Almond essen. lb.	0	0	0	0	1	0	vegetable, Japan ..	70	0	.85	0	66	0	.75	0
expressed	5	7	.5	8	6	6	WOOD, Bee, per ton.								
Aniseed	110	0	120	0	9	0	Fustic, Cuba	140	0	155	0	160	0	175	0
Bay	0	24	.0	3	0	1 1/2	Jamaica	120	0	0	0	110	0	120	0
Bergamott, pr lb.	4	3	.6	0	4	3	Savanna	100	0	0	0	100	0	110	0
Cajeputa, bond, oz.	9	0	0	0	9	0	Zante	105	0	0	0	140	0	180	0
Caraway pr lb.	1	6	.4	0	1	3	Logwood, Cimpchy	180	0	190	0	180	0	0	0
Cassia	0	8	.0	4 1/2	0	2	Honduras	140	0	155	0	130	0	0	0
Cinnamon (in b), oz.	0	8	.0	4 1/2	0	2	St. Domingo	100	0	115	0	130	0	135	0
Cinnamon Leaf ..							Jamaica	100	0	0	0	125	0	130	0